

FILED
SAN MATEO COUNTY

MAY 24 2019

Clerk of the Superior Court

CIV533328
D10
Declaration in Opposition
1842655



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Benjamin H. Klein (#313922)
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bklein@grosskleinlaw.com

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kruzer@birnbaumgodkin.com

Attorneys for Plaintiff,
SIX4THREE, LLC, a Delaware
limited liability company

SUPERIOR COURT OF CALIFORNIA

COUNTY OF SAN MATEO

SIX4THREE, LLC, a Delaware limited
liability company,

Plaintiff,

v.

FACEBOOK, INC., a Delaware corporation;
MARK ZUCKERBERG, an individual;
CHRISTOPHER COX, an individual;
JAVIER OLIVAN, an individual;
SAMUEL LESSIN, an individual;
MICHAEL VERNAL, an individual;
ILYA SUKHAR, an individual; and
DOES 1 through 50, inclusive,

Defendants.

Case No. CIV 533328

**Assigned For All Purposes To Hon. V.
Richard Swope**

**REVISED DECLARATION OF DAVID S.
GODKIN IN OPPOSITION TO DEFENDANTS'
SPECIAL MOTIONS TO STRIKE (ANTI-
SLAPP) FILED MAY 17, 2018 PURSUANT TO
THE AMENDED ORDER ON THE MOTIONS
TO SEAL AND UNSEAL, ISSUED ON
NOVEMBER 1, 2018**

REDACTED FOR PUBLIC FILING

HEARING DATE: June 7, 2019

HEARING TIME: 9:00 a.m.

DEPARTMENT 23

JUDGE: Hon. V. Raymond Swope

FILING DATE: April 10, 2015

TRIAL DATE: April 25, 2019

1 I, David S. Godkin, declare:

2 1. I am an attorney at law and a member of the Law Offices of Birnbaum & Godkin,
3 LLP, counsel for plaintiff Six4Three, LLC ("643") in the above-captioned action.

4 2. True and correct copies of the relevant portions of the testimony of Michael Vernal
5 are attached hereto as Exhibit 1, including Redacted
6 [REDACTED]
7 [REDACTED]
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9 [REDACTED]
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28 [REDACTED]

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18 3. True and correct copies of the relevant portions of the testimony of Ali Partovi are
19 attached hereto as Exhibit 2, including 45:16-56:08, 75:21-79:20 (admits Facebook explicitly
20 promised it would manage and operate Platform as a level competitive playing field and that
21 developers would be able to rely on Platform to build businesses), 90:6-92:14 (Partovi felt at the
22 time that it was better to build a business on Facebook Platform than building a business from
23 scratch on your own or using another platform), 99:11-120:4 Redacted
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1 **Redacted**, 121:5-123:11 (admits Facebook's conduct caused an employee
2 exodus and made it impossible for iLike to recruit staff, business forecasts were slashed, and iLike
3 was forced to sell below its market valuation), 125:19-131:20 (Facebook threatens to shut iLike
4 down unless it sells to Facebook for "not very much"), 167:9-168:20 (authenticates Facebook
5 Platform FAQ (Exhibit 10) and admits Facebook's statements in the FAQ cohere with his
6 understanding of Facebook's affirmative representations of Platform), 188:23-189:15 (admits he
7 helped Facebook grow Platform at Facebook's request by encouraging other companies to build
8 businesses on Facebook Platform).
9

10 4. True and correct copies of the relevant portions of the testimony of Simon Cross
11 are attached hereto as Exhibit 3, including **Redacted**
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Redacted

5. True and correct copies of the relevant portions of the testimony of Facebook's PMQ Allison Hendrix are attached hereto as Exhibit 4, including Redacted

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15 6. True and correct copies of the relevant portions of the testimony of Konstantinos
16 Papamiltiadis are attached hereto as Exhibit 5, Redacted
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4 7. True and correct copies of the relevant portions of the testimony of Bernard Hogan
5 are attached hereto as Exhibit 6, including 45:4-21 (admits it was reasonable to interpret Section
6 9.8 of the SRR giving “all rights to APIs, data, code you receive from us” to mean that “if they
7 had offered it for me to use as a developer, then I could use it as a developer”), 57:4-63:5 (admits
8 that the SRR’s “limit access to data” provision reasonably refers to limiting the volume or rate of
9 data transferred via the APIs – and not that Facebook could shut down entire categories of critical
10 APIs – and that if you abide by the rules “developers would be treated fairly, that they would be
11 able to access the data that is stipulated by Facebook as being accessible”) 67:8-83:3 (describes at
12 length how Facebook’s Graph API 2.0 harmed his applications and research and many other
13 developers), 98:10-99:4 (estimates the total monetary value of the harm caused to him by
14 Facebook at \$200,000), 103:10-107:24 (admits that because of Graph API 2.0 his applications
15 “just couldn’t work”), 108:1-111:13 (admits that in conversations with a Facebook employee, the
16 employee “well understood that these changes would inhibit my applications from working” and
17 the employee suggested he seek employment at Facebook to continue his work), 121:3-127:1,
18 172:18-176:4 (admits it is evident to an informed developer that some applications were
19 whitelisted to continue to access this data, citing Tinder as an example, because the applications
20 still function as they had before Graph API 2.0), 219:23-222:1 (“I had a pretty strong
21 understanding that the social network data would be consistently available for a long period of
22 time, and I certainly acted under the expectations that such core functionality – so core that it’s in
23 the basic permissions – would still be available for a long time”), Redacted
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3 8. True and correct copies of the relevant portions of the testimony of Ted Kramer are
4 attached hereto as Exhibit 7, including 162:13-163:16, 223:6-15 (643 did not receive notice from
5 Facebook until January 2015 that the app would no longer function), 205:17-25 (643 had raised
6 approximately \$250,000 in seed capital, which was lost entirely as a result of Facebook's bait and
7 switch scheme), 181:23-183:9, 195:25-196:16 (643 had contracts with 4,481 end users who had
8 downloaded its app during a trial period).
9

10 9. True and correct copies of the relevant portions of the testimony of Tim Gildea are
11 attached hereto as Exhibit 8, including 115-117 (admits he was aware of Facebook Platform for
12 many years before co-founding 643, likely first became aware of Facebook Platform in 2007, had
13 knowledge of various Facebook Platform APIs, including the friends APIs, and that Facebook
14 Platform was a "pretty common thing in the developer community, so it was something that just
15 about everyone who was developing applications was aware of").
16

17 10. True and correct copies of the relevant portions of the testimony of Tom
18 Scaramellino are attached hereto as Exhibit 9, including 199:1-206:18 (admits 643's entire
19 business plan relied upon Facebook Platform and Facebook's representations regarding how it
20 would manage it, including the prior five years of Facebook's conduct; admits he contacted
21 Facebook employee Michael Huang in person and over email and was refused any discussion
22 regarding how 643 could continue to operate after Graph API 2.0), 252 (admits he was aware of
23 and relied on the Facebook Platform announcement, the Facebook Platform FAQ, various
24 Facebook blog posts, Facebook's Graph API 2010 announcement, various news articles regarding
25 speeches and public representations by Zuckerberg and others, and similar public materials when
26 determining whether 643 was a sound investment); 269:5-272:2 (admits 643's last established
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1 valuation was approximately \$4 million and that this valuation was comparable to other startups at
2 this stage of development).

3 11. A true and correct copy of Exhibit 1 to Plaintiff's Fourth Amended Complaint,
4 Facebook's official Facebook Platform FAQ, is attached hereto as Exhibit 10.

5 12. A true and correct copy of FB-00845980 - FB-00845983 **Redacted**
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9 **Redacted** is attached hereto as Exhibit 11.

10 13. A true and correct copy of FB-00846041 - FB-00846042 **Redacted**
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14 **Redacted** is attached hereto as Exhibit 12.

15 14. A true and correct copy of FB-01054694-FB-01054697 **Redacted**
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19 **Redacted** is attached hereto as Exhibit 13.

20 15. A true and correct copy of FB-00846005 - FB-00846011 **Redacted**
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24 **Redacted** is attached hereto as Exhibit 14.

25 16. A true and correct copy of FB-00927553 - FB-00927556 **Redacted**
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28 **Redacted**

1 Redacted

2 [REDACTED]

3 [REDACTED] (FB-00927553)) is attached hereto as Exhibit 15.

4 17. A true and correct copy of FB-01215536 - FB-01215539 Redacted

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED] (FB-01215536)) is attached hereto as Exhibit 16.

11 18. A true and correct copy of FB-00905310 - FB-00905313 Redacted

12 [REDACTED]

13 [REDACTED]

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16 [REDACTED]

17 (FB-00905312)) is attached hereto as Exhibit 17.

18 19. A true and correct copy of FB-01174454 - FB-01174462 Redacted

19 [REDACTED]

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25 [REDACTED]

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5 (FB-
6 01174454)) is attached hereto as Exhibit 18.

7 20. A true and correct copy of FB-01062011 - FB-01062014 Redacted

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13 (FB-01062011)) is attached
14 hereto as Exhibit 19.

15 21. A true and correct copy of FB-00439054 - FB-00439068 Redacted

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20 is attached hereto as Exhibit 20.

21 22. A true and correct copy of FB-01223017 - FB-01223018 Redacted

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26 hereto as Exhibit 21.

27 23. A true and correct copy of FB-00235809 - FB-00235814 Redacted

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4 is attached hereto
5 as Exhibit 22.

6 24. A true and correct copy of FB-00433779 - FB-00433783 (Redacted

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12 (Redacted FB-00433779)) is attached hereto as Exhibit 23.

13 25. A true and correct copy of FB-00598434 - FB-00598436 (Redacted

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15 (Redacted) is attached hereto as Exhibit 24.

16 26. A true and correct copy of FB-01364327 (Redacted

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19 (Redacted) is
20 attached hereto as Exhibit 25.

21 27. A true and correct copy of FB-00986265 - FB-00986266 (Redacted

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25 (Redacted) is attached hereto as
26 Exhibit 26.

27 28. A true and correct copy of FB-01381966-FB-01381989 (Redacted

1 [Redacted] (FB-01381971))

2 is attached hereto as Exhibit 27.

3 29. A true and correct of FB-01382308-FB-0132334 [Redacted]

7 [Redacted] (FB-01382310)) is attached hereto as Exhibit 28.

8 30. A true and correct copy of FB-01389741-FB-01389752 [Redacted]

12 [Redacted] (FB-01389743)) is attached hereto as Exhibit 29.

13 31. A true and correct copy of FB-00495737 - FB-00495739 [Redacted]

19 [Redacted] (FB-00495737)) is attached hereto as Exhibit 30.

20 32. A true and correct copy of FB-01203441 - FB-01203443 [Redacted]

25 [Redacted] (FB-01203441)) is attached hereto as Exhibit 31.

26 33. A true and correct copy of FB-00986079 - FB-00986085 [Redacted]

1 Redacted

2 (FB-00986079)) is
3 attached hereto as Exhibit 32.

4 34. A true and correct copy of FB-01368413 - FB-01368440 Redacted

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7 is attached hereto as
8 Exhibit 33.

9 35. A true and correct copy of FB-01368446 - FB-01368448 Redacted

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13 is attached hereto as Exhibit 34.

14 36. A true and correct copy of FB-01389634-FB-01389639 Redacted

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18 is attached hereto as Exhibit 35.

19 37. A true and correct copy of FB-01370841- FB-01370845 Redacted

20
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24 (FB-
25 01370841 - FB-01370843)) is attached hereto as Exhibit 36.

26 38. A true and correct copy of FB-01389002 - FB-01389007 Redacted

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is attached hereto as Exhibit 37.

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39. A true and correct copy of FB-01389021- FB-01389038 Redacted

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((FB-01389029)) is attached hereto as Exhibit 38.

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40. A true and correct copy of FB-01368198- FB-01368210 Redacted

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is attached hereto as Exhibit 39.

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41. A true and correct copy of FB-00943406 - FB-00943407 Redacted

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(FB-00943406)) is attached hereto as Exhibit 40.

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42. A true and correct copy of FB-01369059 - FB-01369087 Redacted

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2 [REDACTED] is attached hereto as Exhibit 41.

3 43. A true and correct copy of FB-01218365- FB-01218366 Redacted

4 [REDACTED]
5 [REDACTED]
6 [REDACTED] is attached hereto
7 as Exhibit 42.

8 44. A true and correct copy of FB-01220345-FB-01220350 Redacted

9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED] is attached hereto as Exhibit 43.

14 45. A true and correct copy of FB-00934373 Redacted

15 [REDACTED] is attached hereto as Exhibit
16 44.

17 46. A true and correct copy of FB-00423235 - FB-00423237 Redacted

18 [REDACTED]
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26 [REDACTED]
27 [REDACTED] is attached hereto as Exhibit 45.

1 47. A true and correct copy of FB-00948764-FB-00948765 [Redacted]

2 [Redacted]

3 [Redacted]

4 [Redacted] (FB-00948765)) is attached hereto as Exhibit 46.

5 48. A true and correct copy of FB-00917791 - FB-00917797 [Redacted]

6 [Redacted]

7 [Redacted]

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21 [Redacted] (FB-00917792 - FB-00917793)) is attached hereto as Exhibit 47.

22 49. A true and correct copy of FB-01155756 - FB-01155759 [Redacted]

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27 (FB-01155756)) is attached hereto as Exhibit 48.

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50. A true and correct copy of FB-01368932 - FB-01368967 [Redacted]

[Redacted]
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[Redacted] (FB-01368946)) is attached hereto as Exhibit 49.

51. A true and correct copy of FB-01368113- FB-01368121 [Redacted]

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[Redacted] is attached hereto as Exhibit

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52. A true and correct copy of FB-01370735 - FB-01370736 [Redacted]

[Redacted]
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[Redacted]

[Redacted] is attached hereto as Exhibit 51.

53. A true and correct copy of FB-00095704 - FB-00095717 [Redacted]

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2 [REDACTED] is
3 attached hereto as Exhibit 52.

4 54. A true and correct copy of FB-00947909 - FB-00947911 Redacted

5 [REDACTED]
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10 [REDACTED]
11 Redacted (FB-00947909)) is
12 attached hereto as Exhibit 53.

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14 55. A true and correct copy of FB-00949066 - FB-00949067 Redacted

15 [REDACTED]
16 [REDACTED]
17 [REDACTED] (FB-00949066)) is attached hereto as Exhibit 54.

18
19 56. A true and correct copy of FB-00943408 Redacted

20 [REDACTED]
21 [REDACTED]
22 [REDACTED] is attached hereto as Exhibit 55.

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24 57. A true and correct copy of FB-01368870 - FB-013688702 Redacted

1 Redacted

2 (FB-01368870)) is attached hereto as Exhibit 56.

3 58. A true and correct copy of FB-01366036 - FB-01366070 Redacted

7 (FB-01366036)) is attached hereto as Exhibit 57.

8 59. A true and correct copy of FB-01373378 - FB-01373380 Redacted

13 is attached hereto as Exhibit 58.

14 60. A true and correct copy of FB-00567344 Redacted

21 is attached hereto as Exhibit 59.

23 61. A true and correct copy of FB-00858137 - FB-00858140 Redacted

1 Redacted (FB-00858139 - FB-00858140)) is
2 attached hereto as Exhibit 60.

3 62. A true and correct copy of FB-01312769 - FB-01312773 Redacted
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9 Redacted (FB-01312772)) is attached hereto as Exhibit 61.

10 63. A true and correct copy of FB-01150813 - FB-01150820 Redacted
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14 Redacted is attached hereto as Exhibit 62.

15 64. A true and correct copy of FB-00948246 - FB-00948251 Redacted
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21 Redacted is attached hereto as

22 Exhibit 63.

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24 65. A true and correct copy of FB-00948264 - FB-00948268 Redacted
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1 Redacted

2 [REDACTED] is attached hereto as Exhibit 64.

3 66. A true and correct copy of FB-00908514 - FB-00908519 Redacted

10 [REDACTED] (FB-00908517)) is attached hereto as Exhibit 65.

12 67. A true and correct copy of FB-00954660 - FB-00954663 Redacted

18 [REDACTED] is attached hereto as Exhibit 66.

19 68. A true and correct copy of FB-00963936 - FB-00963937 Redacted

22 [REDACTED] (FB-00963937)) is

23 attached hereto as Exhibit 67.

25 69. A true and correct copy of FB-00899292 - FB-00899306 Redacted

1 Redacted

2 is attached hereto as Exhibit 68.

3 70. A true and correct copy of FB-01367812 - FB-01367818 Redacted

4 Redacted

5 Redacted

6 Redacted

7 Redacted

8 is attached hereto as Exhibit 69.

9 71. A true and correct copy of FB-01370641 - FB-01370643 Redacted

10 Redacted

11 Redacted

12 Redacted

13 is attached hereto as Exhibit 70.

14 72. A true and correct copy of FB-01388109 - FB-01388112 Redacted

15 Redacted

16 Redacted

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19 Redacted

20 is attached hereto as Exhibit 71.

21 73. A true and correct copy of FB-00921658 - FB-00921659 Redacted

22 Redacted

23 Redacted

24 is attached hereto as Exhibit 72.

25 74. A true and correct copy of FB-00061221- FB-00061224 Redacted

1 [Redacted]

2 (FB-00061222)) is attached hereto as Exhibit 73.

3 75. A true and correct copy of FB-00061650 - FB-00061654 [Redacted]

8 [Redacted] (FB-00061654)) is attached hereto as Exhibit 74.

9 76. A true and correct copy of FB-00061365- FB-00061369 [Redacted]

19 [Redacted] is attached hereto as Exhibit 75.

20 77. A true and correct copy of FB-00061233 - FB-00061236 [Redacted]

24 [Redacted] is attached hereto
25 as Exhibit 76.

26 78. A true and correct copy of FB-01363526 – FB-01363532 [Redacted]

1 Redacted

2 [REDACTED] is attached hereto as Exhibit 77.

3 79. A true and correct copy of FB-01352115- FB-01352154 Redacted

10 [REDACTED] is attached hereto as Exhibit 78.

12 80. A true and correct copy of FB-00061249 - FB-00061252 Redacted

18 [REDACTED] is attached hereto as Exhibit

19 79.

20 81. A true and correct copy of FB-00061437 - FB-00061440 Redacted

28 [REDACTED] is attached hereto as Exhibit 80.

1 82. A true and correct copy of FB-00494539 - FB-00494544 [Redacted]
2 [Redacted]
3 [Redacted] is attached hereto as Exhibit 81.
4 83. A true and correct copy of FB-01352696 - FB-01352748 [Redacted]
5 [Redacted]
6 [Redacted]
7 [Redacted] is
8 attached hereto as Exhibit 82.
9 84. A true and correct copy of FB-00427400 - FB-00427406 [Redacted]
10 [Redacted]
11 [Redacted]
12 [Redacted]
13 [Redacted]
14 [Redacted] is attached hereto as Exhibit 83.
15 85. A true and correct copy of FB-00046266 - FB-00046271 [Redacted]
16 [Redacted]
17 [Redacted]
18 [Redacted]
19 [Redacted]
20 [Redacted]
21 [Redacted] (FB-00046269 - FB-00046270)) is
22 attached hereto as Exhibit 84.
23 86. A true and correct copy of FB-00031245 - FB-00031262 [Redacted]
24 [Redacted] is attached hereto as Exhibit 85.
25 87. A true and correct copy of FB-00042856 - FB-00042857 [Redacted]
26 [Redacted] is attached hereto as Exhibit 86.
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88. A true and correct copy of FB-00042899 - FB-00042910 **Redacted**

is attached hereto as Exhibit 87.

89. A true and correct copy of FB-00042763 - FB-00042769 **Redacted**

is attached hereto as Exhibit 88.

90. A true and correct copy of FB-00042722 **Redacted**

is attached hereto as Exhibit 89.

91. A true and correct copy of FB-00042373 - FB-00042378 **Redacted**

is attached hereto as Exhibit 90.

92. A true and correct copy of FB-00043830 - FB-00043835 **Redacted**

is attached hereto as Exhibit 91.

93. A true and correct copy of FB-00045735 - FB-00045738 **Redacted**

is attached hereto as Exhibit 92.

94. A true and correct copy of FB-00043884 - FB-00043889 **Redacted**

1 Redacted is
2 attached hereto as Exhibit 93.

3 95. A true and correct copy of FB-00046047 - FB-00046058 Redacted

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]
8 [REDACTED] is attached hereto as Exhibit 94.

9 96. A true and correct copy of FB-00046279 - FB-00046283 Redacted

10 [REDACTED] is attached hereto as Exhibit 95.

11 97. A true and correct copy of FB-00277665 - FB-00277674 Redacted

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]
16 [REDACTED] (FB-00277665)) is attached hereto as Exhibit 96.

17 98. A true and correct copy of FB-00044220 - FB-00044227 Redacted

18 [REDACTED]

19 [REDACTED]

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21 [REDACTED]

22 [REDACTED]
23 [REDACTED] is attached hereto as Exhibit 97.

24 99. A true and correct copy of FB-00454582 - FB-00454584 Redacted

25 [REDACTED]

26 [REDACTED]
27 [REDACTED] is attached hereto as Exhibit 98.

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100. A true and correct copy of FB-01219463 **Redacted**

is attached hereto as Exhibit 99.

101. A true and correct copy of FB-00521468 - FB-00521484 **Redacted**

(FB-

00521473)) is attached hereto as Exhibit 100.

102. A true and correct copy of FB-00456587 - FB-00456588 **Redacted**

Redacted (FB-00456587)) is attached hereto as Exhibit 101.

103. A true and correct copy of FB-00047444 - FB-00047451 **Redacted**

is

attached hereto as Exhibit 102.

104. A true and correct copy of FB-00045920 - FB-00045927 **Redacted**

1 Redacted

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3 (FB-00045923 - FB-00045924)) is

4 attached hereto as Exhibit 103.

5 105. A true and correct copy of FB-00433628 - FB-00433629 Redacted

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10 is attached hereto as Exhibit 104.

11 106. A true and correct copy of FB-00551862 - FB-00551864 Redacted

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15 (FB-00551862)) is attached hereto as

16 Exhibit 105.

17 107. A true and correct copy of FB-00575243 - FB-00575248 Redacted

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20 (FB-00575243)) is attached hereto as Exhibit 106.

21 108. A true and correct copy of FB-00576265 - FB-00576268 Redacted

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Redacted

is attached hereto as Exhibit 107.

109. A true and correct copy of FB-00549032 - FB-00549033 Redacted

is attached hereto as Exhibit 108.

110. A true and correct copy of FB-01363612 - FB-01363614 Redacted

Redacted is attached hereto as Exhibit 109.

1 111. A true and correct copy of FB-01363618 - FB-01363619 [Redacted]
2 [Redacted]
3 [Redacted]
4 [Redacted]
5 [Redacted]
6 [Redacted] is
7 attached hereto as Exhibit 110.

8 112. A true and correct copy of FB-00528042 - FB-00528043 [Redacted]
9 [Redacted]
10 [Redacted]
11 [Redacted]
12 [Redacted]
13 [Redacted]
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17 [Redacted]
18 [Redacted]
19 [Redacted] (FB-00528042)) is
20 attached hereto as Exhibit 111.

21 113. A true and correct copy of FB-00061393 - FB-00061395 [Redacted]
22 [Redacted]
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9 (FB-
10 00061393 - FB-00061394)) is attached hereto as Exhibit 112.

11 114. A true and correct copy of FB-01353432 - FB-01353439 Redacted

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25 Redacted is attached hereto as Exhibit 113.

26 115. A true and correct copy of FB-01364691 - FB-01364694 Redacted

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1 [Redacted] (FB-01364691))

2 is attached hereto as Exhibit 114.

3 116. A true and correct copy of FB-01364306 - FB-01364312 [Redacted]

4 [Redacted]
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7 [Redacted]
8 [Redacted]
9 [Redacted]

10 [Redacted] is attached hereto as Exhibit 115.

11 117. A true and correct copy of FB-01363717 - FB-01363724 [Redacted]

12 [Redacted]
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14 [Redacted]
15 [Redacted]
16 [Redacted]
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18 [Redacted]
19 [Redacted]
20 [Redacted]

21 [Redacted] is attached hereto as Exhibit 116.

22 118. A true and correct copy of FB-01365361 - FB-01365375 [Redacted]

23 [Redacted]
24 [Redacted]
25 [Redacted]
26 [Redacted]
27 [Redacted]
28 [Redacted]

1 [Redacted] is attached
2 hereto as Exhibit 117.

3 119. A true and correct copy of FB-01355841- FB-01355842 [Redacted]
4 [Redacted]
5 [Redacted]
6 [Redacted]
7 [Redacted]

8 [Redacted] is attached hereto as Exhibit 118.

9 120. A true and correct copy of FB-01364897 - FB-01364900 [Redacted]
10 [Redacted]
11 [Redacted]
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14 [Redacted]
15 [Redacted]

16 [Redacted] is attached hereto as Exhibit 119.

17 121. A true and correct copy of FB-01364161 [Redacted]
18 [Redacted]
19 [Redacted]

20 [Redacted] is attached hereto as Exhibit 120.

21 122. A true and correct copy of FB-01353339 - FB-01353340 [Redacted]
22 [Redacted]

23 [Redacted] is
24 attached hereto as Exhibit 121.

25 123. A true and correct copy of FB-01193401 [Redacted]
26 [Redacted]
27 [Redacted]
28 [Redacted]

1 Redacted

2 [REDACTED] is attached hereto as Exhibit 122.

3 124. A true and correct copy of FB-00517457 Redacted

4 [REDACTED]
5 [REDACTED]
6 [REDACTED] is

7 attached hereto as Exhibit 123.

8 125. A true and correct copy of FB-01352766 - FB-01352768 Redacted

9 [REDACTED]
10 [REDACTED]
11 [REDACTED] (FB-01352766)) is attached hereto as Exhibit 124.

12 126. A true and correct copy of FB-00921983 - FB-00921984 Redacted

13 [REDACTED]
14 [REDACTED]
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16 [REDACTED]
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18 [REDACTED]
19 [REDACTED] is attached hereto as Exhibit 125.

20 127. A true and correct copy of FB-00422927 - FB-00422928 Redacted

21 [REDACTED]
22 [REDACTED]
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25 [REDACTED]
26 [REDACTED]
27 [REDACTED]
28 [REDACTED] is attached hereto as Exhibit 126.

1 128. A true and correct copy of FB-00556670 - FB-00556672 **Redacted**
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED] (FB-00556671)) is attached hereto as Exhibit 127.

8 129. A true and correct copy of FB-00454708 - FB-00454714 **Redacted**
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED] is attached hereto as Exhibit 128.

13 130. A true and correct copy of FB-00058030 - FB-00058033 **Redacted**
14 [REDACTED]
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21 [REDACTED]
22 [REDACTED]
23 **Redacted**

24 [REDACTED]
25 [REDACTED] is attached hereto as Exhibit 129.

26 131. A true and correct copy of FB-00434425 - FB-00434431 **Redacted**
27 [REDACTED]
28 [REDACTED]

1 Redacted

6 (FB-00434427 - FB-00434428)) is attached hereto as Exhibit 130.

7 132. A true and correct copy of FB-00854672 - FB-00854673 Redacted

12 is attached hereto as Exhibit 131.

13 133. A true and correct copy of FB-0000075 - FB-0000096 Redacted

20 (FB-0000078)) is attached hereto as Exhibit 132.

21 134. A true and correct copy of FB-00429152 - FB-00429169 Redacted

25 (FB-00429159)) is attached hereto as Exhibit 133.

26 135. A true and correct copy of FB-00433791 - FB-00433799 Redacted

1 Redacted

2 (FB-00433793)) is attached hereto as Exhibit 134.

3 136. A true and correct copy of FB-01391357 Redacted

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9 is attached hereto as Exhibit
10 135.

11 137. A true and correct copy of FB-01353100 Redacted

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15 is attached hereto as Exhibit 136.

16 138. A true and correct copy of FB-01373066 - FB-01373073 Redacted

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22 is attached hereto as Exhibit
23 137.

24 139. A true and correct copy of FB-00089734 - FB-00089742 Redacted

1 Redacted

2 (FB-00089740)) is attached hereto as

3 Exhibit 138.

4 140. A true and correct copy of FB-00061671 - FB-00061674 Redacted

6 (FB-00061674)) is attached hereto as Exhibit 139.

8 141. A true and correct copy of FB-00417662 - FB-00417673 Redacted

10 (FB-00417670)) is attached

11 hereto as Exhibit 140.

13 142. A true and correct copy of FB-01335815 - FB-01335822 Redacted

18 (FB-

19 01335815 - FB-01335819)) is attached hereto as Exhibit 141.

20 143. A true and correct copy of FB-01370694 - FB-01370701 Redacted

1 Redacted

2 [Redacted]

3 [Redacted] (FB-

4 01370695 - FB-01370700)) is attached hereto as Exhibit 142.

5 144. A true and correct copy of FB-01368044 - FB-01368045 [Redacted]

6 [Redacted]

7 [Redacted]

8 [Redacted]

9 [Redacted]

10 [Redacted]

11 [Redacted] is attached

12 hereto as Exhibit 143.

13 145. A true and correct copy of FB-01354549 - FB-01354571 [Redacted]

14 [Redacted]

15 [Redacted]

16 [Redacted]

17 [Redacted]

18 [Redacted] is attached hereto as Exhibit 144.

19 20 146. A true and correct copy of FB-0000017 - FB-0000026 [Redacted]

21 [Redacted] is attached hereto as Exhibit 145.

22 23 147. A true and correct copy of the relevant portions of FB-00046731 [Redacted]

24 [Redacted] is

25 attached hereto as Exhibit 146.

26 27 148. A true and correct copy of the relevant portions of FB-00047811 [Redacted]

28 [Redacted]

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is attached hereto as Exhibit

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149. A true and correct copy of the relevant portions of FB-00051800 Redacted

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is attached hereto as Exhibit

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150. A true and correct copy of FB-01251951 - FB-01251953 Redacted

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is attached hereto as Exhibit 149.

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151. A true and correct copy of FB-00605188 - FB-00605190 Redacted

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2 [REDACTED] is attached hereto as Exhibit 150.

3 152. True and correct copies of FB-01235610 Redacted

13 Redacted

20 [REDACTED] are attached hereto

21 as Exhibit 151 and Exhibit 152.

23 153. A true and correct copy of FB-00600167 - FB-00600169 Redacted

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9 is attached hereto as Exhibit 153.
10 154. A true and correct copy of FB-00454582 - FB-00454584 Redacted
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27 Redacted is attached hereto as Exhibit 154.
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1 155. A true and correct copy of FB-00494207 - FB-00494213 **Redacted**

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25 **Redacted** is attached hereto as Exhibit 155.

26 156. A true and correct copy of FB-00552036 **Redacted**

27 **Redacted**

28 **Redacted**

1 Redacted

2 [REDACTED] is attached hereto as Exhibit 156.

3 157. A true and correct copy of FB-00552033 Redacted

12 [REDACTED] is attached hereto as Exhibit

13 157.

14 158. A true and correct copy of FB-01368843 - FB-01368856 Redacted

22 Redacted

26 [REDACTED] is attached hereto as Exhibit 158.

27 159. A true and correct copy of FB-01368452 - FB-01368453 Redacted

1 Redacted

2 is attached hereto as

3 Exhibit 159.

4 160. A true and correct copy of FB-00534487 Redacted

22 is attached hereto as Exhibit 160.

23 161. A true and correct copy of FB-00430057 - FB-00430063 Redacted

1 Redacted

2 [REDACTED] is attached hereto as Exhibit 161.

3 162. A true and correct copy of FB-00510070 - FB-00510071 Redacted

4 [REDACTED]

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12 [REDACTED]

13 [REDACTED] is attached

14 hereto as Exhibit 162.

15 163. A true and correct copy of FB-00510419 - FB-00510420 Redacted

16 [REDACTED]

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20 [REDACTED] is attached hereto as Exhibit 163.

21 164. A true and correct copy of FB-00899163 - FB-00899168 Redacted

22 [REDACTED]

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is attached hereto as Exhibit 164.

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165. A true and correct copy of FB-00917804 - FB-00917810 Redacted

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is attached hereto as Exhibit 165.

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166. A true and correct copy of FB-00920691 - FB-00920693 Redacted

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2 [REDACTED] is attached hereto as Exhibit 166.

3 167. A true and correct copy of FB-00926250 - FB-00926257 Redacted

4 [REDACTED]
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9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED] is attached hereto as
14 Exhibit 167.

15 168. A true and correct copy of FB-00948130 - FB-00948136 Redacted

16 [REDACTED]
17 [REDACTED]
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19 [REDACTED]
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21 [REDACTED]
22 Redacted

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hereto as Exhibit 168.

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169. A true and correct copy of FB-00968688 - FB-00968701 Redacted

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Redacted is attached hereto as Exhibit 169.

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170. A true and correct copy of FB-01156203 - FB-01156204 Redacted

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attached hereto as Exhibit 170.

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171. A true and correct copy of FB-01156760 - FB-01156764 Redacted

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is attached hereto as

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Exhibit 171.

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172. A true and correct copy of FB-01188663 Redacted

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12 is
13 attached hereto as Exhibit 172.

14 173. A true and correct copy of FB-01221432 - FB-01221433 Redacted
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19 is attached hereto as Exhibit 173.

20 174. A true and correct copy of FB-01252038 - FB-01252039 Redacted
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1 Redacted is
2 attached hereto as Exhibit 174.

3 175. A true and correct copy of FB-00947595 - FB-00947606 Redacted
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9 is attached hereto as Exhibit
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11 176. A true and correct copy of FB-01151043 - FB-01151044 Redacted
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21 is attached hereto as Exhibit 176.

22 177. A true and correct copy of FB-00947652 Redacted
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26 is attached hereto as Exhibit 177.

27 178. A true and correct copy of FB-00433723 - FB-00433728 Redacted
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1 Redacted

7 is attached hereto as Exhibit 178.

8 179. A true and correct copy of FB-00109950 - FB-00109957 Redacted

14 00109952)) is attached hereto as Exhibit 179.

15 180. A true and correct copy of FB-00089881 - FB-00089884 Redacted

20 is attached hereto as Exhibit 180.

21 181. A true and correct copy of Exhibit 9 to the testimony of Facebook's PMQ, Allison
22 Hendrix (a document published by Facebook in 2007 entitled "f8 Event and Facebook Platform
23 FAQ") is attached hereto as Exhibit 181.

25 182. A true and correct copy of FB-01351861 - FB-01351866 Redacted

1 Redacted

2 Redacted is attached hereto as Exhibit 182.

3 183. A true and correct copy of FB-01352632 - FB-01352642 Redacted

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13 Redacted is attached hereto as Exhibit 183.

14 184. A true and correct copy of FB-01366934 - FB-01366948 Redacted

15 Redacted

16 Redacted is attached

17 hereto as Exhibit 184.

18 185. A true and correct copy of FB-00889856 - FB-00889861 Redacted

19 Redacted

20 Redacted

21 Redacted is attached hereto as Exhibit 185.

22 186. A true and correct copy of FB-01217108 - FB-01217112 Redacted

23 Redacted

24 Redacted is attached hereto as Exhibit 186.

1 187. A true and correct copy of FB-01353037 - FB-01353039 [Redacted]
2 [Redacted]
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9 [Redacted]
10 [Redacted] is attached hereto as Exhibit 187.
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12 188. A true and correct copy of FB-00080931 - FB-00080943 [Redacted]
13 [Redacted]
14 [Redacted]
15 [Redacted] (FB-00080939)) is attached
16 hereto as Exhibit 188.
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18 189. A true and correct copy of FB-01363061 - FB-01363113 [Redacted]
19 [Redacted]
20 [Redacted]
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22 [Redacted] is
23 attached hereto as Exhibit 189.
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25 190. A true and correct copy of FB-01363526 – FB-01363535 [Redacted]
26 [Redacted]
27 [Redacted]
28 [Redacted]

1 Redacted

2 [REDACTED] is
3 attached hereto as Exhibit 190.

4 191. A true and correct copy of FB-01369295 Redacted

5 [REDACTED]
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8 [REDACTED]
9 [REDACTED] is attached hereto as Exhibit 191.

10 192. A true and correct copy of FB-01373074 Redacted

11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED] is attached hereto as Exhibit 192.

15 193. A true and correct copy of FB-01389969 Redacted

16 [REDACTED]
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21 [REDACTED]
22 [REDACTED]
23 [REDACTED]
24 [REDACTED] is

25 attached hereto as Exhibit 193.

26 194. A true and correct copy of FB-00454612 - FB-00454614 Redacted

27 [REDACTED]
28 [REDACTED]

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is attached hereto as Exhibit 194.

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195. A true and correct copy of FB-00580073 - FB-00580074 Redacted

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attached hereto as Exhibit 195.

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196. A true and correct copy of FB-00574447 - FB-00574448 Redacted

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is attached hereto as

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Exhibit 196.

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197. A true and correct copy of FB-01215116 - FB-01215118 [Redacted]

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is attached hereto as Exhibit 197.

198. A true and correct copy of FB-00194154 - FB-00194155 [Redacted]

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is attached hereto as Exhibit 198.

199. A true and correct copy of FB-01193711 [Redacted]

[Redacted]

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is attached hereto as Exhibit 199.

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200. A true and correct copy of FB-00043600 Redacted

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is attached hereto as Exhibit 200.

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201. A true and correct copy of FB-01217135 - FB-01217135 Redacted

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is attached hereto as

Exhibit 201.

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202. A true and correct copy of FB-00477297 - FB-00477299 Redacted

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attached hereto as Exhibit 202.

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203. A true and correct copy of FB-00483662 - FB-00483665 Redacted

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is attached hereto as Exhibit 203.

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6 204. A true and correct copy of FB-00569937 - FB-00569938 Redacted

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is attached hereto as Exhibit 204.

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17 205. A true and correct copy of FB-00190690 - FB-00190692 Redacted

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is attached hereto as Exhibit 205.

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22 206. A true and correct copy of FB-00189010 - FB-00189020 Redacted

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207. A true and correct copy of FB-00026998 - FB-00027002 Redacted

[REDACTED]

[REDACTED] is attached hereto as Exhibit 207.

208. A true and correct copy of FB-00025985 - FB-00025992 Redacted

[REDACTED]

[REDACTED] is attached hereto as Exhibit 208.

209. A true and correct copy of FB-00025853 - FB-00025857 Redacted

[REDACTED]

[REDACTED] is attached hereto as Exhibit 209.

210. A true and correct copy of FB-00025847 - FB-00025848 Redacted

[REDACTED]

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4 [REDACTED] is attached hereto as Exhibit 210.

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6 211. A true and correct copy of FB-00026028 - FB-00026036 Redacted

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14 [REDACTED] (FB-00026034 - FB-00026036)) is attached hereto
15 as Exhibit 211.

16 212. A true and correct copy of FB-01312032 Redacted

1 Redacted

2 [Redacted]

3 [Redacted] (FB-01312063)) is attached hereto as Exhibit 212.

4 I declare under penalty of perjury under the laws of the State of California that the above is
5 true and correct.

6 Executed on May 14, 2019 in Boston, Massachusetts.

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10 /s/ David S. Godkin
David S. Godkin, Esq.

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CERTIFICATE OF SERVICE

I, Jennifer Cuellar, declare:

I am a citizen of the United States, am over the age of eighteen years, and am not a party to or interested in the within entitled cause. My business address is 88 Kearny Street, 10th Floor, San Francisco, California 94108.

On May 24, 2019, I served the following document(s) on the parties in the within action:

REVISED DECLARATION OF DAVID S. GODKIN IN OPPOSITION TO DEFENDANTS' SPECIAL MOTIONS TO STRIKE (ANTI-SLAPP) FILED MAY 17, 2018 PURSUANT TO THE AMENDED ORDER ON THE MOTIONS TO SEAL AND UNSEAL, ISSUED ON NOVEMBER 1, 2018

| | |
|---|--|
| X | VIA HAND: The above-described document(s) will be placed in a sealed envelope which will be hand-delivered on this same date by _____, addressed as listed below. |
|---|--|

Superior Court of California County of San Mateo
Department 23
400 County Center
Redwood City, CA 94063

| | |
|---|---|
| X | VIA E-MAIL: I attached the above-described document(s) to an e-mail message, and invoked the send command at approximately _____ AM/PM to transmit the e-mail message to the person(s) at the e-mail address(es) listed below. My email address is jcuellar@mpbf.com |
|---|---|

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Palo Alto, CA 94301
Email: jrusso@computerlaw.com
csargent@computerlaw.com

Attorneys for Theodore Kramer and Thomas Scaramellino

Theodore Kramer
Email: Theodore.kramer@protonmail.com

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Donald.sullivan@wilsonelser.com

Attorneys for Gross & Klein LLP

1 Steven J. Bolotin
2 MORRISON MAHONEY LLP
3 250 Summer Street
4 Boston, MA 02210
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14 I declare under penalty of perjury under the laws of the State of California that the foregoing is
15 a true and correct statement and that this Certificate was executed on May 24, 2019.

16 By 
17 Jennifer Cuellar

EXHIBIT 1

REDACTED FOR PUBLIC FILING

EXHIBIT 2

UNSEALED VERSION OF DOCUMENT PURSUANT TO THE NOVEMBER 1, 2018 ORDER

1 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

2 IN AND FOR THE COUNTY OF SAN MATEO

3

4 SIX4THREE, LLC, a Delaware
5 limited liability company,

6 Plaintiff,

7 vs.

No. CIV 533328

8 FACEBOOK, INC., a Delaware
9 corporation; and DOES 1
10 through 50, inclusive,

11 Defendants.

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October 10, 2017

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Reported by:
Natalie Y. Botelho
CSR No. 9897

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MR. GODKIN: Q. If you look at the bottom

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of the first page of Exhibit 3, you see a URL which

18

is facebook.com, then some additional information?

19

A. Yeah.

20

Q. Do you recall ever reading this on

21

Facebook's website?

22

A. I can't say exactly whether I recall

23

reading this. However, there's nothing here that I

24

haven't -- that looks unfamiliar to me. I feel like

25

I've seen this information in some form before.

1 Q. Did you from time to time go to Facebook's
2 website and read what was posted on the website?

3 A. Yes.

4 Q. And do you recall going to the website
5 from time to time to read announcements made by
6 Facebook about its platform?

7 MR. LERNER: Vague and overbroad.

8 THE WITNESS: Yes.

9 MR. GODKIN: Q. If you focus for a moment
10 on the second paragraph of Exhibit 3, do you see
11 that there's a statement differentiating between
12 applications people use on Facebook and the core of
13 the site? Do you see that?

14 A. Yes.

15 Q. And then it goes on to say, "Applications
16 are things like Photos, Notes, Groups and Events"?

17 A. Yes.

18 Q. Do you see that? Do you recall coming to
19 any understanding about what Facebook meant when it
20 was differentiating between applications and the
21 core of its website?

22 MR. LERNER: Calls for speculation.

23 THE WITNESS: Well, yes. Between this,
24 what you just pointed out, but also the language in
25 the fourth paragraph says it more overtly, where it

1 says, "we've made it so that any developer can build
2 the same applications that we can." What I
3 understood that to mean was that Facebook's own
4 features would -- would be built as applications
5 using the same platform and using the same APIs that
6 third-party applications would.

7 And there was a example unveiled at the F8
8 event, which was the Video application, and that's
9 in the last paragraph of this -- of this document.
10 That was sort of a symbolic example where Facebook
11 was unveiling a significant new feature, and it was
12 unveiled in the form of an application that had --
13 had no inherent advantages over third-party
14 applications --

15 MR. GODKIN: Q. What --

16 A. -- on the platform.

17 Q. Was that concept important to your
18 company, iLike, the concept that Facebook would be
19 building applications using the same tools and would
20 have no inherent advantages over third-party
21 applications?

22 MR. LERNER: Leading, compound, and lacks
23 foundation.

24 THE WITNESS: That was very important to
25 us.

1 MR. GODKIN: Q. Why was that very
2 important to you?

3 A. Because it suggested that there would be a
4 level playing field where a third party could
5 compete not only with other third parties, but even
6 with Facebook's own capabilities, and could
7 accumulate customers based on merit and not based
8 on, you know, special advantages within the --
9 within Facebook.

10 Q. Was that concept something you and your
11 company were aware of back in April, when you
12 decided to go ahead and build an app on the Facebook
13 Platform?

14 MR. LERNER: Overbroad, calls for
15 speculation.

16 THE WITNESS: I don't think I was. I
17 wasn't. I don't know if others within the company
18 were.

19 MR. GODKIN: Q. Did you become aware of
20 that at the F8 in May of 2007?

21 MR. LERNER: Overbroad.

22 THE WITNESS: Yes.

23 MR. GODKIN: Q. And the Face -- was
24 Facebook's demonstration of its new Video app an
25 illustration of that concept?

1 MR. LERNER: Same objection.

2 THE WITNESS: It was.

3 MR. GODKIN: Q. Was it your understanding
4 that Facebook was using its new Video app in order
5 to communicate to third-party developers that there
6 would be a level playing field out there?

7 MR. LERNER: Calls for speculation, it's
8 overbroad, and it's leading.

9 THE WITNESS: That was my understanding.

10 MR. GODKIN: Q. And that was important to
11 you why?

12 MR. LERNER: Misstates the testimony.

13 THE WITNESS: I've already answered that.

14 MR. GODKIN: Q. Okay. I'll withdraw
15 that, then. Do you see in the third paragraph the
16 term "social graph" is used?

17 A. Yes.

18 Q. Did you have an understanding of what
19 Facebook meant when it referred to the social graph?

20 A. Yes.

21 Q. What was your understanding?

22 MR. LERNER: Calls for speculation.

23 THE WITNESS: A graph is a computer
24 science term, where you have nodes, which you could
25 think of as dots, and then you have connections

1 between the nodes, which you can think of as lines
2 connecting them. And the social graph meant the
3 interconnections between people, where each person,
4 each human, is a node, and each friendship is a line
5 connecting two nodes or two people.

6 MR. GODKIN: Q. And in the fourth
7 paragraph, do you see there's a reference to
8 "written FQL," and then in parentheses it says
9 "Facebook Query Language"? Do you see that?

10 A. Yes.

11 Q. Do you know what that means?

12 MR. LERNER: Same objection.

13 THE WITNESS: Broadly. There were two new
14 languages, FQL and FBML, which is Facebook Markup
15 Language -- sorry -- Facebook Markup Language. And
16 these were -- essentially these were both extremely
17 similar to existing standard languages, but modified
18 to enable specific Facebook capabilities. And FQL
19 provided abilities for the -- for an application to
20 get information from Facebook. So as part of the
21 APIs that I mentioned before.

22 So as an example, if an app wanted to find
23 out what are the favorite music of a consumer, they
24 could submit an FQL query using the Facebook Query
25 Language to look up that consumer's favorite music.

1 MR. GODKIN: Q. And when you're using the
2 term "language," are you talking about a computer
3 programming language?

4 A. Sorry. Yes.

5 Q. Okay. All right. Put that one aside.

6 Let me ask the court reporter to mark as
7 the next exhibit another document.

8 (Whereupon Exhibit 4 was marked for
9 identification.)

10 MR. GODKIN: Q. I've placed in front of
11 you what we've marked as Exhibit 4, Mr. Partovi. If
12 you could take a moment to review it.

13 A. Mm-hmm.

14 Q. It's entitled "F8 Event and Facebook
15 Platform FAQ" at the top. Do you see that?

16 A. Mm-hmm.

17 Q. You need to say "yes" or "no."

18 A. Yes.

19 Q. Have you seen this document before?

20 A. This does not look familiar to me.

21 Q. Do you see in the very first paragraph,
22 under the heading "What is F8," and then it says,
23 "F8 was an event held at the San Francisco Design
24 Center on May 24th --

25 A. Yes.

1 Q. -- 2007, during which Mark Zuckerberg
2 unveiled the next evolution of Facebook Platform."
3 And it talks about a Hackathon, as well.

4 A. Yeah.

5 Q. Does this refresh your recollection that
6 the F8 in 2007 took place on May 24, 2007 --

7 A. Yes.

8 Q. -- at the San Francisco Design Center?

9 MR. LERNER: Asked and answered. He's
10 already testified this document's not familiar.

11 THE WITNESS: So on the third paragraph, I
12 might have seen this, because this is the --
13 "opportunity to build a business" at the end is a
14 thing that I remember pointing out to you
15 specifically was important to me.

16 MR. GODKIN: Q. All right. And so you're
17 referring to the third paragraph that's entitled
18 "What is Facebook Platform," correct?

19 A. Yes.

20 Q. And in that paragraph, it also refers
21 to -- this is in the last sentence -- "deep
22 integration into the Facebook website."

23 A. Yes.

24 Q. Does that refresh your recollection as to
25 whether you read this document before?

1 A. That one, not as much. "Opportunity to
2 build a business" is something that I remember
3 reading. And I think I remember Mark Zuckerberg
4 saying it on stage, as well. And it wasn't in this
5 document, so therefore, maybe I read it here.

6 Q. When you say "it wasn't in this document,"
7 are you referring --

8 A. It wasn't in Exhibit 3.

9 Q. Exhibit 3. Okay. And if you refer down
10 to -- down towards the bottom of the first page,
11 there's a section called "Why did Facebook launch
12 Facebook Platform?" Do you see that?

13 A. Yeah.

14 Q. And it says, "Our engineers have created
15 great applications for Facebook, but we recognize
16 that third-party developers can help us make
17 Facebook an even more powerful social utility." Do
18 you see that?

19 A. Yeah.

20 Q. Does reading that refresh your
21 recollection as to whether or not you heard
22 Mr. Zuckerberg or someone else talk about
23 third-party developers making Facebook a more
24 powerful social utility?

25 MR. LERNER: Asked and answered, and

1 mischaracterizes the testimony.

2 THE WITNESS: The term "more powerful
3 social utility" doesn't ring a bell.

4 MR. GODKIN: Q. Okay. And then the last
5 sentence of this paragraph states, "Developers also
6 benefit from Facebook Platform as it gives them the
7 potential to broadly distribute their applications
8 and even build new business opportunities." Do you
9 see that?

10 A. Yes.

11 Q. Does that refresh your recollection as to
12 whether you recall Mr. Zuckerberg or someone else
13 talking about Facebook Platform and providing new
14 business opportunities to developers?

15 MR. LERNER: Same objections, and
16 mischaracterizes the prior testimony.

17 THE WITNESS: That language I definitely
18 recall hearing from Facebook, but I don't recall
19 whether it was in this document or from Zuckerberg
20 on stage or various other Facebook communications.
21 But to broadly distribute applications and build new
22 business and opportunities were definitely things
23 that Facebook in multiple different ways was touting
24 as the benefits of the platform for developers.

25 MR. GODKIN: Q. And was that one of the

1 things that you considered in deciding to go ahead
2 and build an application on the Facebook Platform?

3 MR. LERNER: Asked and answered, and it's
4 vague as to time.

5 THE WITNESS: I think we saw that as
6 marketing. The things I said earlier were more
7 critical to us, namely the ability to communicate
8 with customers and build lasting customer
9 relationships.

10 MR. GODKIN: Q. Then if you turn to the
11 third page of Exhibit 4, at the top there's a
12 section entitled "How will Facebook deal with
13 applications that compete with one another or even
14 compete with Facebook-built applications?" Can you
15 read that section quickly.

16 (Pause.)

17 THE WITNESS: Yeah.

18 MR. GODKIN: Q. Do you recall reading
19 this paragraph before?

20 MR. LERNER: Asked and answered.

21 THE WITNESS: I don't recall reading it in
22 this document, but I recall it being an explicit
23 promise from Facebook that applications from
24 third-party developers would have a level playing
25 field with applications built by Facebook, and that

5 MR. GODKIN: Q. Right.

9 [REDACTED]

[REDACTED]

[REDACTED]

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| China | 2117 | 1.0 |
| China | 2118 | 1.0 |
| China | 2119 | 1.0 |
| China | 2120 | 1.0 |
| China | 2121 | 1.0 |
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| China | 2123 | 1.0 |
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| China | 2132 | 1.0</ |

[illegible]

| | 2007 | 2008 | 2009 |
|--|---------------|---------------|---------------|
| Number of employees | 6,000 | 6,000 | 6,000 |
| Revenue | \$100 million | \$100 million | \$100 million |
| Operating income | \$10 million | \$10 million | \$10 million |
| Net income | \$8 million | \$8 million | \$8 million |
| Earnings per share | \$1.60 | \$1.60 | \$1.60 |
| Dividends per share | \$0.40 | \$0.40 | \$0.40 |
| Payout ratio | 25% | 25% | 25% |
| Free cash flow | \$12 million | \$12 million | \$12 million |
| Capital expenditures | \$5 million | \$5 million | \$5 million |
| Debt | \$20 million | \$20 million | \$20 million |
| Equity | \$80 million | \$80 million | \$80 million |
| Total assets | \$100 million | \$100 million | \$100 million |
| Current liabilities | \$20 million | \$20 million | \$20 million |
| Long-term debt | \$10 million | \$10 million | \$10 million |
| Retained earnings | \$60 million | \$60 million | \$60 million |
| Common stock | \$20 million | \$20 million | \$20 million |
| Preferred stock | \$0 | \$0 | \$0 |
| Accumulated other comprehensive income | \$0 | \$0 | \$0 |
| Goodwill | \$0 | \$0 | \$0 |
| Intangible assets | \$0 | \$0 | \$0 |
| Property, plant, and equipment | \$80 million | \$80 million | \$80 million |
| Investments | \$0 | \$0 | \$0 |
| Other assets | \$0 | \$0 | \$0 |

[illegible]

[illegible]

1 And I believe Facebook themselves was amongst the
2 different groups that we borrowed machines from.
3 Although I wasn't the one doing that, so my memory
4 of that is a bit hazy.

5 Q. How many -- do you recall how many users
6 of the Facebook app iLike had at its peak?

7 MR. LERNER: Vague and overbroad.

8 THE WITNESS: It's an estimate. I would
9 say 25 million, but that could be significantly off.
10 It could be -- it could be 20 or it could be 30.

11 MR. GODKIN: Q. Somewhere between 20 and
12 30?

13 A. It was in the tens of millions.

14 Q. And do you recall approximately when the
15 peak was achieved time-wise?

16 A. 2009.

17 Q. So at the bottom of page -- you see
18 there's some page numbers, page 3 of 14, at the
19 bottom?

20 A. Yeah.

21 Q. On page 3 of 14, you answered a question
22 by stating that you pushed and pushed with Facebook
23 asking for some sort of exclusive relationship. Do
24 you see that?

25 A. Yeah.

1 Q. And what was the -- what sort of exclusive
2 relationship were you pushing for?

3 A. So we had hoped to have a partnership with
4 Facebook where we'd have a contractual commercial
5 relationship with them. And, you know -- and one
6 where we would be the exclusive provider of music,
7 music-related features on Facebook.

8 Q. And what did Facebook respond?

9 A. I mean, this is what I remember, is they
10 weren't interested in doing any exclusive -- or
11 even -- or contractual relationship, and -- and
12 instead wanted us to build -- build an app on the
13 platform.

14 Q. And at the top, on page 4 of 14, you
15 answered the question by saying that, "They
16 repeatedly said they won't do an exclusive
17 relationship, but would rather create a level
18 playing field where we could compete with other
19 third parties." Do you see that?

20 A. Yeah.

21 Q. And by "they," do you recall any
22 individual people who you were talking to Facebook
23 about this potential exclusive relationship?

24 A. I was speaking to Allison Rosenthal.

25 Q. Do you know what her job was within

1 Facebook?

2 A. I don't remember the title, but it was
3 business development. Maybe director of business
4 development or manager of business development. I
5 believe she had a specific focus on music, music
6 services or the music category, but I don't remember
7 for sure.

8 Q. Do you happen to know whether she still
9 works for Facebook?

10 A. I don't think she does.

11 Q. Is she somebody that you've stayed in
12 touch with over the years?

13 A. Minimally.

14 Q. Do you happen to know where she works
15 today?

16 A. I should, but I've forgotten.

17 Q. And the phrase "level playing field"
18 appears in that sentence, as well. Is that
19 something that Allison Rosenthal said to you?

20 A. I don't recall.

21 Q. Do you remember anybody else at Facebook
22 using the phrase "level playing field"?

23 A. Matt Cohler.

24 Q. Can you spell his last name?

25 A. C-O-H-L-E-R.

1 Q. What was his title at the time he had that
2 conversation with you?

3 A. I think chief product officer, but I
4 might -- I might be mistaken on that, as well.

5 Q. And do you recall how many times you spoke
6 with Matt Cohler about this topic of a level playing
7 field?

8 A. I --

9 MR. LERNER: Mischaracterizes the
10 testimony.

11 THE WITNESS: The only conversation that I
12 remember clearly was at F8, at the F8 conference. I
13 remember him saying that the Video app that Facebook
14 had built using their own platform was -- was not
15 just a one-off. It was that -- it was indicated
16 that henceforth Facebook's new capabilities and
17 features would be built on the platform using the
18 same -- you know, on the same level playing field as
19 third-party apps.

20 So, for example, I remember him suggesting
21 that if a third party built a better video app than
22 Facebook's own Video app, the third party could
23 conceivably have -- reach more consumers than
24 Facebook's own Video app.

25 MR. GODKIN: Q. Was what -- was this a

1 speech that he was making in front of the group?

2 A. No. This was a one-on-one conversation.

3 Q. With you?

4 A. Yes.

5 Q. With anybody else besides the two of you,
6 Mr. Cohler and yourself?

7 A. I think my brother, Hadi, was there, but I
8 don't remember for sure.

9 Q. Did Mr. Cohler -- do you recall, was he
10 involved in making a presentation to the F8 on the
11 subject of this Video app Facebook had built?

12 A. I don't remember.

13 Q. All right. Other than Mr. Cohler and
14 Allison Rosenthal, do you recall anybody else from
15 Facebook talking with you about this concept of a
16 level playing field?

17 MR. LERNER: Mischaracterizes the
18 testimony.

19 THE WITNESS: I don't. Sorry. This fell
20 off. I don't.

21 MR. GODKIN: Q. So at the bottom of
22 page -- on page 4 of 14, the interview asks you,
23 "What made iLike think that Facebook Platform would
24 be a big deal?" Do you see that?

25 A. Yes.

1 and efficiencies and capabilities that it -- that it
2 offered to developers, would be superior to ordinary
3 web development, would be the preferred place for
4 people to build websites and services rather than
5 just on the open web.

6 Q. Okay. And then on the page 12 of 14, at
7 the bottom of the page, you respond to the question
8 by stating, "What I'd say is that anybody who is
9 currently involved in building a consumer-facing
10 website should be thinking about whether they should
11 be building a Facebook app instead." Why did you
12 think that?

13 A. I don't see it. This is on page 12?

14 Q. At the very bottom of the page.

15 A. Ah.

16 Q. You're asked a question, and then you
17 respond --

18 A. Right.

19 Q. -- "what I'd say." Do you see that?

20 A. Yes.

21 Q. So why did you make that statement?

22 A. Because I believed that the -- all the
23 benefits that one could have of building a website
24 could be enjoyed within a Facebook app, and plus
25 additional benefits that were not available for a

1 stand-alone website, such as access to the various
2 APIs that Facebook provided and access to the social
3 graph.

4 Q. And so do I understand correctly that you
5 were basically saying you thought, given these
6 additional features, the Facebook Platform was a
7 better place to build a website than an ordinary
8 website, correct?

9 MR. LERNER: Leading, mischaracterizes the
10 testimony.

11 THE WITNESS: I -- I remember thinking it
12 was a better place to build a service or to build a
13 business than on a stand-alone website.

14 MR. GODKIN: Q. In addition to the
15 Facebook Platform, are you aware of any -- anything
16 else that Facebook did in the 2007 to 2009 time
17 frame that encouraged third-party app developers to
18 build businesses on Facebook?

19 MR. LERNER: Overbroad, calls for
20 speculation.

21 THE WITNESS: Am I aware of anything else
22 Facebook did that encouraged -- I mean, in addition
23 to Facebook Platform, a lot of things that they did,
24 I would say, fall under the umbrella of the term
25 "Facebook Platform," but in case you don't count it

1 under that, there was a different set of APIs called
2 Facebook Connect, which I can't remember whether it
3 officially was considered part of Facebook Platform
4 or separate, but these were capabilities for apps
5 that -- sorry -- for websites that were not housed
6 within Facebook, nevertheless to have access to some
7 of the same services and data and comparable APIs as
8 if -- compared to apps that were housed within
9 Facebook.

10 And so essentially the benefits of
11 building an app entirely within Facebook, some of
12 those benefits were now offered to websites that
13 were not housed within Facebook, but could connect
14 to Facebook from the outside, so to speak.

15 MR. GODKIN: Q. Did iLike take advantage
16 of Facebook Connect on the iLike website portion of
17 its business?

18 A. No, we did not.

19 Q. Are you aware of any other companies that
20 you were involved with or consulting with at the
21 time who took advantage of Facebook Connect?

22 A. I don't remember specifically.

23 Q. Are you familiar with something called
24 Facebook Fund?

25 A. Ah, yes.

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MR. GODKIN: Q. When did you sell the
business to MySpace?

A. Fall of 2009. I think September 2009 is
when it closed.

Q. And what was the sale price?

A. I'm not sure if I'm allowed to disclose
because it's confidential.

Q. Okay.

MR. LERNER: It's not.

MR. GODKIN: It's not confidential?

MR. LERNER: I can look it up on the
Internet for you right now.

MR. GODKIN: Yeah.

THE WITNESS: I can tell you the public
reported numbers --

MR. GODKIN: Q. That's fine.

A. -- were in the neighborhood of
\$20 million.

Q. To your understanding, did the amount for
which you were able to sell the company, was that
amount affected one way or the other by all of these

1 changes that Facebook was making?

2 A. Yes.

3 Q. How?

4 A. So the biggest factor is that it -- they
5 significantly impeded our ability to retain or
6 attract employees. So our staff collectively was
7 either quitting or threatening to quit, and it was
8 very difficult for us to recruit any new staff.

9 But also, the products that we sold were
10 disappearing. So one of our means for revenue would
11 be to approach a touring artist, such as, to use
12 your example, Tom Petty, although specifically, I
13 mean, actual examples were U2, Coldplay, other major
14 artists. And we would offer to promote their
15 concert more aggressively than what we already did
16 in return for cash.

17 So our app for free would notify all U2
18 fans within a five-mile radius that "There is a U2
19 concert coming up near you in the next two months."
20 But if U2 would pay us extra money, we would notify
21 all fans in a 20-mile radius or 50-mile radius to
22 reach a larger audience of, you know, prospective
23 concert ticket buyers. And in return for cash, we
24 would send those notifications to those fans.

25 Our ability to do that and to collect that

8 So our business forecasts had to be
9 slashed because one of our most lucrative sources of
0 revenue disappeared. So that impacted the
1 valuation.

[illegible]

19 MR. GODKIN: Q. Mr. Partovi, do you know,
20 or to your knowledge, did Facebook ever make a
21 public announcement that third-party apps would not
22 be on a level playing field with Facebook apps?

23 MR. LERNER: Vague and overbroad.

24 THE WITNESS: Certainly not in 2007. Did
25 they sometime later than that do so? Nothing comes

1 to mind. What I would say is that when they
2 announced this so-called Great Apps program, which I
3 think might have been mid 2008, it inherently
4 implied it's not a level playing field because there
5 are Great Apps and then there are other apps, and
6 that the Great Apps are somehow superior -- you
7 know, given benefits not available to the rest.

8 So that public announcement, at least in
9 between, you know, apps, suggested that the playing
10 field was not level. I don't think there was any
11 explicit statement saying that Facebook's own core
12 features would be even a higher level of capability,
13 although it was -- by then it was already, you know,
14 in practice and kind of obvious.

15 MR. GODKIN: Q. Did you ever -- strike
16 that.

17 I think you testified earlier this morning
18 about some conversations you had with at least one
19 person who was in corporate development for
20 Facebook, and I can't remember the name of the
21 person. Do you remember what you told me? Or I can
22 look at my notes.

23 A. Dan Rose was in corporate development. I
24 don't remember if Allison Rosenthal was. Allison
25 Rosenthal was in business development, but -- I

1 don't understand -- I don't know what you're asking.

2 Q. Maybe I've used the wrong -- sorry, I
3 might have used the wrong term. I meant to ask, was
4 there somebody that you talked to or met with who
5 was in business development at Facebook?

6 MR. LERNER: Vague and overbroad.

7 THE WITNESS: Allison Rosenthal. And that
8 was in the pre-platform, you know, 2006, early 2007
9 time frame. There were others. Dan Rose was a
10 person that I did not communicate with so much. My
11 brother had more communications with Dan Rose. And
12 I believe he was the -- if I'm not mistaken, head of
13 business development, but I'm not sure his official
14 title. It might have been head of corporate
15 development.

16 MR. GODKIN: Q. And so I'm focusing now
17 on meetings that you personally had --

18 A. Okay.

19 Q. -- with business development people. Can
20 you identify or do you recall any specific meetings
21 that you had with business development people?

22 MR. LERNER: Lacks foundation.

23 THE WITNESS: There were many over the
24 course of the years, but the -- if we're talking now
25 about post F8, after our app had gone through this,

1 you know, period of, you know, success and then
2 having features deprecated, we -- we were trying to
3 sell the company. And I met with a team at Facebook
4 that was led by Ethan Beard, and he was an ex-Google
5 guy. I forget if he was in corporate development or
6 business development, but, you know, he was
7 relatively new at Facebook, if I remember correctly,
8 and we were -- I'm sorry. Take it back. I think
9 that -- I take it back. He was not in corporate
10 development or business development. I think
11 actually he had become the head of the platform
12 team. Forgive me, because it's so long ago, and the
13 titles I don't remember.

14 And I remember another name now. Elliot
15 Schrage, Schrage. Schrage, Schrage. So I think in
16 that sequence I told you before, after Josh Elman
17 came Elliot Schrage, and then Elliot Schrage either
18 moved to a different role or to a higher role, and
19 then Ethan Beard came in maybe under him.

20 So in that earlier succession of people
21 who we interacted with was Elliot and then Ethan.
22 And Ethan, I think, was head of the platform, but we
23 had a conversation with him relating to the
24 possibility of Facebook acquiring the company.

25 MR. GODKIN: Q. Approximately when did

1 that conversation take place?

2 A. I think in 2009.

3 Q. And who attended? Was it a meeting or a
4 telephone call?

5 A. It was a meeting.

6 Q. Who attended the meeting?

7 A. I don't remember the other attendees. It
8 was -- there were more than one people.

9 Q. From --

10 A. Sorry. There were multiple people.

11 Q. From Facebook?

12 A. From Facebook. I think I might have been
13 the only one from iLike.

14 Q. Was the meeting at Facebook's
15 headquarters?

16 A. It was.

17 Q. And tell me everything you can remember
18 about the discussion at that meeting.

19 A. I mean, the most salient thing I remember
20 was that there -- Ethan said at some point, you
21 know -- you know, that, "We," meaning Facebook,
22 "could acquire you, but not for very much." And I
23 remember asking, "Why not for very much?" and him
24 saying, "Because we could just shut you down."

25 And the reason this, you know, has stuck

1 in my memory is because I took it as somewhat of a
2 threat, and I -- I don't know whether he intended it
3 to be conveyed as a threat or just a, you know,
4 passing observation on his part, but I remember
5 immediately notifying other people on my team that
6 now Facebook has articulated this explicit threat.

7 I don't -- it had never been articulated
8 before, that they could -- or that they would
9 consider arbitrarily shutting us down. And, you
10 know, when you're threatened, it only takes once.
11 You don't forget it. So from that point on, we
12 lived under that threat.

13 Q. Who on your team did you communicate what
14 had been said to --

15 A. Definitely my brother, Hadi, and I'm
16 pretty sure Nat Brown.

17 Q. Back in the 2007-'8 time frame, were you
18 familiar with Facebook's privacy settings and
19 controls?

20 A. I was. They've changed so many times that
21 I don't remember right off the top of my head what
22 they were then.

23 Q. Do you recall at that time, 2007-2008,
24 were -- were Facebook users able to control what
25 information was accessible to other Facebook users?

1 MR. LERNER: Overbroad and calls for
2 speculation.

3 THE WITNESS: You know, my recollection of
4 this is hazy, but with that giant disclaimer, what I
5 remember is that at the time that the platform first
6 opened up, meaning the first F8, the controls
7 offered to consumers were not very much, and --
8 some, but not very much.

9 And in particular, what I remember as
10 pertains to our discussion is that third-party apps
11 like ours could, through one user, see the data of
12 that user's friends, as I mentioned earlier, as long
13 as though the one who was our customer himself or
14 herself could see those -- his friends' information.

15 So if our customer's John, and his friend
16 is Mary, if John can see Mary's birthday, then we
17 could also see Mary's birthday, as long as John gave
18 us permission. At some point I think that ability
19 was restricted, but I don't remember when or exactly
20 what the new restriction was.

21 MR. GODKIN: Q. Now, fast-forward to like
22 2014. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1 representations from Facebook executives in person,
2 which was applications from third-party developers
3 would be on a level playing field with applications
4 built by Facebook.

5 MR. LERNER: Q. Do you see anything there
6 about Facebook core products there?

7 MR. GODKIN: Objection.

8 THE WITNESS: So no, not in that FAQ. I
9 remember Matt Cohler representing to me at F8 that
10 Facebook's own new features would be built using the
11 platform.

12 MR. LERNER: Q. And so your testimony is
13 that Mr. Cohler represented to you that from that
14 date forward, all Facebook new features would be
15 built as apps on the platform?

16 A. More or less. You know, when you say
17 "all," if they had made -- you know, if they had
18 made modest changes to the other parts, we would not
19 have been surprised, but dramatic changes, we would
20 have been surprised and we were surprised.

21 Q. Okay. Let's back up. I just -- I want to
22 get to not more or less, but exactly what you claim
23 Mr. Cohler represented to you. Did Mr. Cohler
24 represent to you that from that day forward,
25 Facebook would never develop its own core products

1 Plaintiff's representations in this complaint, you
2 were neither a advisor with an agreement nor
3 yourself initially a shareholder, correct?

4 MR. GODKIN: Objection.

5 THE WITNESS: I was a shareholder at this
6 point.

7 MR. LERNER: Q. Understood. But you only
8 became a shareholder after your brother transferred
9 shares to the entity that you and he share, correct?

10 A. Yes. All of that was prior to 2007,
11 though. I think that was in 2005 or '6.

12 Q. Okay.

13 A. So at the time of this Q and A, I was a
14 shareholder. At the time of F8, I was a
15 shareholder. Whether I was an advisor or not is a
16 semantic. I was -- I was helping my brother help
17 them. He was a formal advisor, and -- you know, and
18 I was informally.

19 Q. Okay.

20 A. You didn't ask, but I'll say that the word
21 "induce" here is not how I would describe my role at
22 all.

23 Q. How would you describe your role?

24 A. So what it says here was that I, as an
25 ally -- you know, in my capacity as an ally of

1 Facebook, was committed to helping them grow their
2 platform and to induce developers to participate.
3 While I was a shareholder of Facebook, my main
4 allegiance was to my own corporation, iLike, and I
5 was committed to helping iLike build its business.
6 To the extent that the platform on its face had
7 benefits that everybody could see, I was touting
8 those benefits, but not with any inducement goal in
9 mind.

10 And, you know, it wasn't -- I would never
11 have described it as saying I was committed to
12 helping them -- helping Facebook grow that operating
13 system or to induce anyone to doing anything. I was
14 committed to helping iLike grow.

15 Q. Indeed. As you testified, you tried to
16 get an exclusive deal, right?

17 A. That's correct. Before the platform
18 launched, yeah.

19 Q. Right.

20 A. Which is, frankly, what any company would
21 do.

22 Q. Right. You understand there were risks in
23 depending on Facebook, correct?

24 A. Did I understand at the time? Yes.

25 Q. And you understood very well by, for

EXHIBIT 3

UNSEALED VERSION OF DOCUMENT PURSUANT TO THE NOVEMBER 1, 2018 ORDER

COUNTY OF SAN MATEO

Defendants .

[illegible]

Case No. CIV 533328

CONFIDENTIAL

Deposition of SIMON CROSS

London, England

Wednesday, October 25, 2017

Reported By:
Leah Willersdorf,
ACR, MBIVR, QRR2,
International Participating
Member NCRA.

Job No. 10037047

1 **Q. How did you become aware that it was**
2 **possible to develop an app on the Facebook Platform?**

3 A. Around 2007, 2008, there was a lot of talk
4 about -- in the media and in the tech community about
5 Facebook's Platform.

6 **Q. What do you recall hearing about, it?**

7 A. I recall understanding that you were able
8 to build applications that lived inside Facebook on
9 the web and that those applications would have access
10 to certain information about people in order to
11 provide a social experience.

12 **Q. What kinds of information did you learn**
13 **that these applications would have access to?**

14 A. I don't remember the full range of
15 information that the applications had access to at
16 that time, but it certainly included the information
17 about people who chose to use those applications.

18 **Q. Do you recall any of the types of**
19 **information you could have access to?**

20 A. You can have access to some of the
21 information about that person's friends and that
22 person's own interests.

23 **Q. Did Facebook, to your knowledge, encourage**
24 **developers to develop applications on the Facebook**
25 **Platform?**

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Q. Okay. All right. Now let's focus on when you actually joined the company, starting in 2010.

At that time, did Facebook encourage developers to build applications on the platform?

MS. MILLER: Objection; lacks foundation, calls for speculation.

THE WITNESS: Typically, when a company has a developer platform, it will ask -- suggest developers build applications for it.

BY MR. GODKIN:

Q. And was that true in the case of Facebook?

MS. MILLER: Same objections.

THE WITNESS: I was part of an organization that would have suggested to developers that they build on the Facebook Platform, yes.

Did you represent to the public that developers would have access to the Full Friends List?

MS. MILLER: Objection; asked and answered.

BY MR. GODKIN:

Q. You can answer.

A. If access to a user's Full Friends List was available at that time, I would likely have represented to developers that that was available at that time.

Q. Did you represent to developers that they would have access to Friends Permissions?

A. If the Friends Permissions were available at that time, I would have likely represented to developers that those permissions were available at that time.

Q. Did you represent to developers that they would have access to the News Feed API?

A. If the News Feed API was available at that point, I would have represented to developers that they would have access to the News Feed API.

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Q. When you joined the company in September of 2010 and were speaking with partners and speaking at developer conferences and the like, did you ever speak about the Statement of Rights and Responsibilities?

A. When you're working with developers, you make it clear to them that by integrating with Facebook's Platform, they are agreeing to certain terms and conditions, which include the SRR, yes.

Q. Did you encourage them to read it?

A. We would generally have made sure that developers were aware that those documents were what they were agreeing to when they build against the Facebook Platform.

Q. Did you make them aware that they would have to click through or click-indicate their agreement to the document when they became a developer?

A. Every developer -- my understanding at that time was that in order to be classified as a developer, to build an application, you would have had to click through and agree to that document.

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Q. To your knowledge and understanding, did Facebook benefit from having all of these third-party application developers developing apps on the Facebook Platform?

MS. MILLER: Objection; lacks foundation, calls for speculation and vague.

THE WITNESS: I don't have insight into the specific benefits of Facebook -- I can't speak on behalf of Facebook overall at this point. I know that --

BY MR. GODKIN:

Q. Okay -- go ahead. Finish your answer.

6 A. Facebook is -- when people find value in
7 using Facebook or using applications that are
8 integrated with Facebook, my personal view is that
9 that's likely good for developers, good for people,
10 and good for Facebook.

12 A. People -- my personal view, again, is that
13 people would potentially use Facebook more and use the
14 applications that were integrated with Facebook more.

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Q. Do you know, can you approximate how many

developers used those APIs?

A. What do you mean by the term "developer"?

Q. Third-party application developers who

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Q. Is it correct that on this portion of your talk, you indicated that a key part of the Facebook Platform was for apps to be able to share stories with Facebook and for Facebook to drive traffic to apps?

MS. MILLER: Objection; compound.

I'm also going to object to this exhibit to the extent it's just a set of selected screenshots from a talk without any of the actual video, audio, or transcript of the talk.

You can answer.

THE WITNESS: That's what the logo suggests, and it matches my recollection of why developers were interested in building for the Facebook Platform.

BY MR. GODKIN:

Q. When you talked about driving traffic, were you referring, at least in part, to being able to publish actions to the News Feed or the Wall?

MS. MILLER: Objection; misstates the

1 document.

2 THE WITNESS: Typically, developers would
3 build applications that gave people who use them tools
4 to share content and information back to Facebook.
5 Facebook would make that -- would sometimes make that
6 information or those posts visible to a person's
7 friends, and sometimes those friends would click on
8 the stories and would either land on the app
9 developer's website or sometimes in the developer's
10 app itself.

11 BY MR. GODKIN:

12 Q. Were those features important to enable
13 the applications to gain more users and to grow in
14 popularity?

15 MS. MILLER: Objection; lacks foundation,
16 calls for speculation.

17 THE WITNESS: My understanding is that one
18 of the reasons why developers build for the Facebook
19 Platform is that it would help them reach new
20 audiences.

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■ [REDACTED]

■ [REDACTED]

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Q. Was the purpose of this slide that you

1 showed developers to represent to the developers that
2 they could potentially grow their app businesses by
3 using the platform?

4 A. I think that is a fair representation of
5 what we were -- what we would have suggested to
6 developers and what developers would have understood
7 some of the value of the Facebook Platform being to
8 them.

9 Q. Did the developers have to purchase
10 advertising in order to do that?

11 A. No.

12 Q. Do you understand what the phrase "organic
13 distribution" means?

14 A. I would love to understand what you think
15 it means.

16 Q. Well, do you have an understanding? I'm
17 more interested in what your understanding is, not my
18 understanding. Is it a term you've used?

19 A. It's a term I've heard before. I have a
20 personal definition for what it means.

21 Q. What is that?

22 A. My personal definition, as I understand
23 it, is that that is the distribution an app developer
24 may get from a person's friend -- from somebody
25 sharing information to Facebook that results in a

1 referral or a click to an app developer.

2 Q. Were you, by showing this slide and making
3 this talk at this point in time, telling developers
4 that by using the Facebook Platform, their apps could
5 grow organically as opposed to having to pay for
6 marking and advertising and the like?

7 MS. MILLER: Objection; compound.

8 THE WITNESS: I don't recall the specifics
9 of what I said. The slide does not suggest that that
10 stack refers to organic or paid distribution.

11 BY MR. GODKIN:

12 Q. All right. If you turn to the next
13 page, 2L. Do you have that in front of you?

14 A. I do.

15 Q. The slide behind you says:

16 "So, what's the Facebook Platform for?"

17 And then:

18 "For developers - it's a global growth
19 machine."

20 Do you see that?

21 A. That's what the slide says, yes.

22 Q. Did you use that term, "global growth
23 machine," in your talk?

24 A. If it's on the slide, it's possible that
25 I would have said those words.

1 **Q. Possible or probable and likely?**

2 A. You can make up a definition of
3 "probability" yourself.

4 **Q. What did you mean by "global growth**
5 **machine"?**

6 A. At the time, Facebook was a product, an
7 application used in many countries in the world, and
8 if developers enabled the people who used their apps
9 to share content to Facebook, then it's possible that
10 they would have been able to reach an audience outside
11 of the territory where they built their application.

12 **Q. Turn to the next page, 2M. Do you see**
13 **that in front of you?**

14 A. I do.

15 **Q. It appears behind you that you were**
16 **discussing building, distributing, and promoting apps**
17 **on the Platform?**

18 A. That's what those three words on the slide
19 are, yes.

20 **Q. What did you mean by "distribute"?**

21 A. My recollection of what the term
22 "distribute" meant in this context was the ability for
23 apps that gave their people that used them the power
24 to share information to Facebook could potentially
25 grow the number of people using that application.

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Q. So do you have exhibit -- 2N in front of you?

A. That's right.

Q. Do you recall that this was a slide that you showed the audience at the Moscow event?

A. I recall this being a slide I would have shown, yes.

Q. Is it correct that you were walking developers through different components of the Facebook Platform?

A. Part of the value of an event like this to developers is that they can begin to understand how the Facebook Platform works and its various components and how they fit together.

Q. One of the components is Open Graph, which is at the bottom left there.

Do you see that?

A. I see that on the slide, yes.

1 Q. What did you mean by "Open Graph"?

2 A. My recollection of the term "Open Graph"
3 was a phrase that Facebook used at the time to define
4 a way of apps sharing structured -- sorry -- of people
5 using apps, and those apps able to share structured
6 information back to Facebook about people's activity
7 in those apps.

8 Q. You included some different buckets there,
9 including places, events, photos, friends, et cetera.

10 Do you see that?

11 A. I see those on the slide.

12 Q. Then turn to the next page, 20. Do you
13 see that?

14 A. I do, yes.

15 Q. Is it true that on this slide you were
16 demonstrating to developers how to query the Full
17 Friends List at the code level?

18 A. I --

19 MS. MILLER: And I'll object that this
20 exhibit is blurry.

21 THE WITNESS: Yes, this exhibit's pretty
22 blurry. What it seems to suggest is I was showing the
23 developers how to call the friends edge of the Graph
24 API.

25 ///

1 BY MR. GODKIN:

2 Q. Am I correct that you're looking at -- do
3 you see on the left there, it says "Graph API" and
4 then "FQL Query"?

5 A. I do see that.

6 Q. Immediately under that, it says "Get" and
7 there's a dropdown menu there?

8 A. I do see that.

9 Q. Then immediately to the right, do you see
10 the "slash, friends" after some numbers, correct?

11 A. I do see that. Well, those numbers are my
12 Facebook user ID.

13 Q. All right. So you were demonstrating how
14 to query your friends list, correct?

15 MS. MILLER: Objection; asked and
16 answered.

17 THE WITNESS: I was demonstrating how to
18 call the friends edge of the Graph API.

19 BY MR. GODKIN:

20 Q. And by calling the friends edge of the
21 Graph API, what does that do for a developer?

22 A. What that edge returns depends today on
23 the version of the Graph API they're calling.

24 Q. At the time you made this demonstration,
25 what did it accomplish?

1 A. My recollection is that calling the
2 friends edge of the Graph API would have returned an
3 array of objects, and those objects would represent
4 all of the friends that the calling user had on
5 Facebook.

6 Well, actually, not all of the friends. Up to
7 all of the friends.

8 **Q. And explain the reason for that**
9 **qualification.**

10 A. The Facebook Platform has always included
11 settings for people who could opt out of having their
12 information admitted by the API. So it's possible and
13 has always been possible, to my understanding, that an
14 API such as this would not necessarily return the
15 user's complete Friend List.

16 **Q. Because some of the friends might have**
17 **opted out, correct?**

18 A. That's correct.

19 **Q. Turn to the next page, 2P. You're**
20 **continuing your demonstration here, correct?**

21 A. It seems so.

22 **Q. And you're showing developers all the**
23 **different kinds of data they can access about a user's**
24 **friends, and that's the dropdown menu that we see on**
25 **the left there?**

1 MS. MILLER: Objection; misstates the
2 document.

3 THE WITNESS: What this document shows is
4 that I was most likely showing developers some of the
5 information they could access about an app using a
6 person's friends.

7 BY MR. GODKIN:

8 Q. And the information includes things like
9 music, notes, locations, and photos, correct?

10 A. Actually, I just want to re-answer the
11 previous question. It's unclear from this document
12 whether or not I am actually showing the access to an
13 app-using person's friends' photos or the app-using
14 person's photos. It's not clear to me from this
15 screenshot which of those it is. Just to be clear.

16 Q. All right. Then if you turn to the next
17 page, 2Q.

18 A. That's correct.

19 Q. Were you walking the developers through
20 the process of requesting different permissions here?

21 MS. MILLER: Objection.

22 THE WITNESS: It appears that that's the
23 case, but from -- mostly from memory, that photo is
24 extremely blurry, but it's likely that that represents
25 me showing developers the permissions that were

1 grantable via the API at that time.

2 BY MR. GODKIN:

3 Q. Was one of the permissions grantable
4 manage_friendslists?

5 A. It's possible that that permission was
6 listed at the time. I just want to refer to my
7 previous answer, my previous statement, that, like,
8 that permission is often misrepresented as to its
9 behavior and value and use.

10 Q. Misrepresented by whom?

11 A. There have been cases where I have had to
12 explain to developers that that permission does not
13 refer to the Friends List.

14 Q. What does it do? What does it --

15 MS. MILLER: Objection; asked and
16 answered.

17 THE WITNESS: I think I answered that
18 question earlier. Facebook had at the time the
19 concept of Friends Lists as distinct from the Friend
20 List.

21 BY MR. GODKIN:

22 Q. Okay.

23 A. And this permission allowed an application
24 to manage the user's Friends Lists. I'm sorry if
25 that's pedantic. I want to make sure I'm accurate for

1 the record.

2 Q. Do you have 2R in front of you?

3 A. Yes.

4 Q. Did you then walk developers through the
5 publish_actions permissions?

6 A. It's likely that that permission was
7 something we surfaced to developers, yes.

8 Q. What did the publish_actions permission
9 do?

10 A. It allowed the -- the publish_actions
11 permission is a permission that a user could grant an
12 application. Once granted, it would allow that
13 application to publish Open Graph actions back to
14 Facebook.

15 Q. And -- strike that.

16 Turn, if you would, to the next page, 2S.

17 A. Yes.

18 Q. There is a reference at the top of this
19 slide, behind you, to SDK. Do you see that?

20 A. I do.

21 Q. What is an SDK?

22 A. An SDK is a package of software that helps
23 a developer to interact or integrate with a
24 third-party API.

25 Q. Is it related to an iPhone app?

1 A. One of those SDKs was for iOS. It's
2 represented by the second icon from the left.

3 Q. Okay. Were you explaining to developers
4 that they could build their apps and they would work
5 on different platforms, including the iPhone?

6 A. We were representing to developers that
7 there was an SDK that Facebook provided for developers
8 on these various platforms, and that SDK would help
9 them interact with a Facebook Platform; for example,
10 granting permissions and calling API methods.

11 Q. And it would help them access all of the
12 data that we've been discussing previously about this
13 exhibit?

14 A. These SDKs help developers call the API.

15 Q. Turn to the next page.

16 A. Yes.

17 Q. It appears to be two different people
18 speaking at this presentation. Do you know who they
19 are?

20 MS. MILLER: I'll just object that this is
21 a compound exhibit. This appears to be a different
22 video with different dates.

23 THE WITNESS: Yes, that's a good point.
24 This appears to be a different video. I cannot tell
25 from the screenshot who these people are with complete

1 certainty.

2 BY MR. GODKIN:

3 Q. Well, on the left side of the page, it
4 says it was originally recorded at the Facebook World
5 Hack Moscow, September 2012. Isn't that the same
6 event that the previous slides were recorded at?

7 A. It appears to be a video from the same
8 event, yes.

9 Q. But you don't know who these people are?

10 A. I said I cannot identify them with
11 complete certainty.

12 Q. Is one of them Conor Treacy?

13 A. It's possible.

14 Q. Do you recall attending a presentation
15 made by Mr. Treacy and another person at the same
16 event in Moscow?

17 A. At these events, I have a varying range of
18 responsibilities. So it's possible, potentially even
19 likely, that I wasn't actually even physically present
20 for this talk. I was dealing with my other duties at
21 the event.

22 Q. All right. Turn to the next page, 2U.

23 A. Yes.

24 Q. Do you see that in front of you?

25 A. I do.

A. I do.

A. This is a set of the Friends Permissions
 ere available at the time, yes.

A. I can see that, yes.

[illegible]

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Q. Do users of Facebook have any way of preventing developers from accessing their photos if they wanted to prevent it?

MS. MILLER: Objection; vague as to time.
BY MR. GODKIN:

Q. At the time that this presentation was made in 2012.

A. My recollection is that there were two mechanisms in place. The first --

Q. What were the two?

A. The first mechanism was that a user, when they logged into an application, was able to grant the permissions or choose to not grant the permissions.

Q. What was the second?

A. As a user of Facebook, there were settings in your account that prevented -- that allowed you to prevent your information being admitted to applications by friends of yours who use those applications and granted the Friends Permissions.

Q. So any user, if he or she wanted to, could prevent people from seeing their photos in the same time frame, correct?

A. My recollection is that there was a way

6 A. That is familiar to me.

11 A. That's my understanding of what that set
12 of settings was for.

[illegible]

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Q. Right. Is this another presentation that you made or video that you recorded that was put on the Facebook website?

MS. MILLER: Objection; compound, lacks foundation.

THE WITNESS: This slide seems to represent a video that I recall being involved in producing that was uploaded to YouTube.

BY MR. GODKIN:

Q. It indicates that it was from the Facebook Open Graph series. Do you see that?

1 A. It suggests that this video is helping
2 developers to help them build their first Open Graph
3 application.

4 Q. Do you recall that Facebook had a series
5 of videos that it put on its developer website called
6 the Open Graph Series?

7 A. I guess you could characterize it as an
8 Open Graph series. It was a number of videos that
9 I was involved in producing, which, together, you
10 could frame as a series.

11 Q. All right. Well, it says "from Facebook
12 Open Graph Series." Do you see that?

13 A. That's what it says.

14 Q. It says it was published on February 28,
15 2013. Do you see that?

16 A. That doesn't look correct to me. I can't
17 see the date and time in this printout. It's too
18 fuzzy.

19 Q. Maybe you have a worse copy than I am
20 looking at here, so I apologize for that.

21 In any event, was the purpose of this video for
22 you to train developers on building apps on the Open
23 Graph?

24 A. My recollection is that this video was
25 about helping developers how to build their first Open

1 Graph application against Facebook's APIs.

2 Q. Understanding that you can't read the
3 date, do you recall when this was published on
4 YouTube?

5 A. I don't recall. I remember it being in
6 either 2012 or 2013. Some of these slides make it
7 look like it was 2012. Some of them make it look like
8 it was 2013.

9 I don't recall the specific date, I'm afraid.

10 Q. All right. Turn to the next page, 2X.

11 A. Got it.

12 Q. That's a screenshot from the same video,
13 is it not?

14 A. It --

15 MS. MILLER: Objection; lacks foundation.

16 THE WITNESS: It's hard to guarantee that.
17 It looks like it probably is.

18 BY MR. GODKIN:

19 Q. And you were talking about designing your
20 Timeline aggregations?

21 A. That's what the slide says that the
22 presenter was talking about; again, presuming if I was
23 the presenter of that slide.

24 Q. Do you recall presenting a slide in which
25 it's stated, "design your Timeline aggregations"?

1 A. It seems reasonable that that's a slide
2 I would have presented.

3 Q. What did you mean by "design your Timeline
4 aggregations"?

5 A. My understanding is that Timeline
6 aggregations were a way for developers to curate the
7 information that they had published -- that their
8 users had published to Facebook on those users'
9 timelines.

10 Q. And did that help the -- was the intent
11 for that to help the developer's application grow its
12 number of users?

13 MS. MILLER: Objection; lacks foundation,
14 calls for speculation.

15 THE WITNESS: Developers use Timeline
16 aggregations for a number of reasons.

17 BY MR. GODKIN:

18 Q. Including to help grow their number of
19 applications?

20 MS. MILLER: Same objections.

21 THE WITNESS: That may have been one of
22 the reasons that developers use Timeline aggregations.

23 BY MR. GODKIN:

24 Q. Turn to the next page of 2Y. Do you have
25 that open in front of you?

1 A. Yes.

2 Q. Do you have it in front of you?

3 A. Yes. Sorry. Yes, 2Y.

4 Q. Do you recognize who this person is on the
5 video?

6 MS. MILLER: I'll just state for the
7 record, this, again, appears to be a separate video.

8 THE WITNESS: Yes. This appears to be a
9 separate video. I do recognize the gentleman.

10 BY MR. GODKIN:

11 Q. Who is it?

12 A. I recall that to be Jason Clark.

13 Q. And do you recall -- strike that.

14 Can you read on the document? It says on the
15 bottom left: "As presented at Facebook Mobile
16 Developer Day" in November 2012?

17 A. I can see those words, yes.

18 Q. What was the Facebook Mobile Developer
19 Day, if you know?

20 A. My recollection is that it was an event
21 where we invited mobile developers to spend time with
22 us and help them understand how to integrate their
23 mobile applications with the Facebook Platform and
24 Facebook Mobile SDKs.

25 Q. Where did that event take place?

1 A. I recall there being potentially a number
2 of Facebook Mobile Developer Days. I remember the
3 first being in Facebook's Menlo Park headquarters.

4 Q. Do you recall attending some or all of
5 these?

6 A. I do not recall attending the Facebook
7 Mobile Developer Day.

8 Q. Did Facebook publish this on its developer
9 website on March 1, 2013?

10 MS. MILLER: Lacks foundation.

11 THE WITNESS: I can't speak for Facebook,
12 and the picture is blurry. It looks like this video
13 was uploaded to YouTube.

14 BY MR. GODKIN:

15 Q. Did Facebook Developer website have access
16 to videos, mainly videos of this nature that could be
17 clicked on by developers who wanted to watch them?

18 MS. MILLER: Objection; vague as to time,
19 and compound.

20 THE WITNESS: It's possible that these
21 videos were embedded on the Facebook Developer
22 website, although I cannot be sure which ones, where,
23 or when.

24 BY MR. GODKIN:

25 Q. Turn to the next page, 2Z.

1 A. Yes.

2 Q. Now what is being depicted on this page,
3 this screenshot?

4 A. It's hard to discern from the image. My
5 recollection is that this was part of a slide that
6 represented the connections between people.

7 Q. All right. Turn to the next page, 2AA.

8 A. Yes.

9 Q. On page 2AA, there is a screenshot and the
10 highlighted item is "Post Photo." Do you see that?

11 A. I think so.

12 Q. Was the person who made this presentation
13 explaining to developers how to use their app to post
14 photos in the app or on the --

15 MS. MILLER: Objection; lacks foundation.

16 THE WITNESS: This seems to be a still
17 from a screenshot at an event which I don't think
18 I was present at. So it's hard for me to know exactly
19 what was being discussed.

20 BY MR. GODKIN:

21 Q. All right. Do you recognize what is
22 depicted on this screenshot, the page which says "Post
23 Status Update," "Post Photos," "Pick Some Friends,"
24 et cetera?

25 A. To me, this slide represents a screenshot

1 of a computer. That computer is showing X code and on
2 that -- and inside X code is what probably is an
3 application. It's unclear to me if that's exactly
4 what it is. Even if it is, it's unclear to me whose
5 application is actually being shown here. I wasn't at
6 the event, as far as I recall.

7 Q. Turn to the next page, 2AB.

8 A. Yes.

9 Q. Do you --

10 A. I want to call out again this seems like a
11 different video published on a different day.

12 Q. This indicates that it was published on
13 June 20, 2013, correct?

14 A. Again, I can't see that from the exhibit
15 in front of me.

16 Q. All right. What is shown here, though, is
17 a page of your computer? Do you see your picture
18 there and your name, Simon Cross?

19 MS. MILLER: Objection; lacks foundation.

20 THE WITNESS: It looks like this is a
21 screenshot that was taken from a website that I was
22 logged into. I can't determine from this exhibit if
23 this was, like, a video that I was presenting, but it
24 seems to represent a screenshot of a website that
25 I was logged into.

1 BY MR. GODKIN:

2 Q. Well, if I represent to you that the audio
3 of this particular presentation is your voice, does
4 that refresh your recollection as to whether you ever
5 made this presentation and had it posted on YouTube
6 for access to developers?

7 MS. MILLER: I'll just say objection;
8 lacks foundation.

9 Your representation can't refresh his
10 recollection, but --

11 MR. GODKIN: Ms. Miller, a fig leaf can be
12 used to refresh recollections, so I disagree with you
13 on that.

14 BY MR. GODKIN:

15 Q. But you can answer the question.

16 A. I cannot guarantee what this exhibit in
17 front of me actually represents. It is reasonable,
18 possible, likely that this is a video that I helped
19 produce. I just want to be clear that, like, it's
20 not -- I cannot a hundred percent guarantee that
21 that's what I'm seeing in front of me. It's likely.

22 Q. All right. Turn to the next page,
23 page 2AC. Do you have that in front of you?

24 A. I do.

25 Q. Were you explaining to developers how to

1 **access a user's Full Friends List?**

2 MS. MILLER: Objection; lacks foundation.

3 THE WITNESS: What I see here is a
4 screenshot that shows that I am demonstrating --
5 again, assuming it's me demonstrating it -- that an
6 application --

7 BY MR. GODKIN:

8 **Q. That's still your picture in the upper**
9 **right, is it not?**

10 A. It is my picture in the upper right.
11 I want to be clear that that doesn't necessarily mean
12 that this is a video that I am presenting. It's
13 possible that somebody else presented the video using
14 screenshots or video that I had recorded. I just want
15 to be clear that that's -- you know, with this piece
16 of paper in front of me, those caveats exist.

17 **Q. All right.**

18 A. Again, assuming that this is a video that
19 I am presenting, what the screenshot seems to show to
20 me is that I am demonstrating to the viewer how an
21 application would access the public profile and friend
22 list, which are the words written on the page.

23 **Q. At the time in 2013, was that the Full**
24 **Friends List?**

25 A. Again, it's possible. Like, at the time

1 my recollection is that that API would have
2 returned -- would have included friends who had not
3 used the app, but the term "Full Friends List," as
4 I think you mean it, is potentially misleading given
5 that it's possible that that API call did not include
6 every friend of that user on Facebook because of the
7 opt-outs we discussed earlier.

8 Q. All right. Turn to the next page, 2AD.

9 A. Yes.

10 Q. Do you see that in front of you?

11 A. I do.

12 Q. Do you see the "Get" query on that page?

13 A. I do.

14 Q. Then the boxes that are checked underneath
15 it?

16 A. I do.

17 Q. Do you recall demonstrating how a
18 developer could utilize this portion of the developer
19 website?

20 MS. MILLER: Objection; lacks foundation.

21 THE WITNESS: It seems reasonable to me
22 that that's what this represents.

23 BY MR. GODKIN:

24 Q. Is it accurate that under "Picture," there
25 is a check mark for height and a check mark for width?

1 Do you see that?

2 A. That's what I see in front of me.

3 Q. Does that allow the developer to format
4 the size of the photo that is going to appear, in this
5 case to be 200 pixels high and 100 pixels wide?

6 A. This seems to represent to me that you
7 could specify the height and width of the profile
8 picture that the API was going to return to represent
9 the people returned by this API.

10 Q. Why did Facebook allow developers to
11 specify the height and width of the profile picture?

12 MS. MILLER: Objection; lacks foundation.

13 THE WITNESS: My understanding is that
14 developers built applications on various platforms and
15 made use of these assets in various ways, and it was
16 valuable to them to specify the size and aspect ratio
17 of the images that they would want to show in their
18 applications.

19 BY MR. GODKIN:

20 Q. Then if you turn to the next page, 2AE.

21 Do you see that?

22 A. Yes.

23 Q. Is this an example of you showing the
24 developers a photo of one of your friends that is 200
25 pixels high and 100 pixels wide?

Simon Cross

1 MS. MILLER: Objection; lacks foundation.

2 THE WITNESS: This document shows an image
3 of a person. It may have been a friend of mine. It's
4 hard to tell; it's blurry. And it may be 200-by-100
5 pixels. Again, it's hard to tell, but that's a
6 reasonable suggestion of what this depicts.

7 BY MR. GODKIN:

8 Q. Turn to the next page, 2AF, if you would.

9 A. Yes.

10 Q. Is it fair to say that here you were
11 demonstrating to developers how to publish to the News
12 Feed?

13 MS. MILLER: Objection; lacks foundation.

14 THE WITNESS: This suggests to me that
15 I was showing developers how to publish a story, on
16 behalf of one of their users, to Facebook.

17 [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

1

2 Q. All right. Just so that I'm understanding
3 this correctly, Facebook users can set their privacy
4 settings for their data, such as photos, birthday,
5 et cetera, correct?

6 MS. MILLER: Objection; vague.

7 THE WITNESS: In general, people have
8 privacy controls for their information.

9 BY MR. GODKIN:

10 Q. Do I understand that these privacy
11 controls are different from developer permissions?

12 MS. MILLER: Objection; vague.

13 THE WITNESS: My understanding is that
14 there are several privacy concepts that are important
15 here. One of those privacy concepts is app
16 permissions. The other is -- another one are privacy
17 settings available to people on Facebook.

18 BY MR. GODKIN:

19 Q. So privacy settings -- and I'm using your
20 English pronunciation of that word --

21 A. Thank you.

22 Q. -- are what other Facebook users can see,
23 right?

24 A. Yes. In general, users have a way to
25 control who sees what information on Facebook.

5 THE WITNESS: That doesn't match my
6 understanding. My understanding is that people have
7 control, varying levels of control, over who can see
8 what, and those settings, as I understand it, would
9 also affect the ability of an app to access that
10 information.

[illegible]

EXHIBIT 4

REDACTED FOR PUBLIC FILING

1 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

2 IN AND FOR THE COUNTY OF SAN MATEO

3 ---oOo---

4 SIX4THREE, LLC, a Delaware
5 limited liability company,

6 Plaintiff,

7 vs. Case No. CIV. 533328

8 FACEBOOK, INC., a Delaware
9 corporation and DOES 1
through 50, inclusive,

10 Defendant.

11 _____/

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14 *** HIGHLY CONFIDENTIAL ***

15

16 DEPOSITION OF PMQ OF FACEBOOK, INC.

17 ALLISON HENDRIX

18

19 WEDNESDAY, JUNE 21, 2017

20

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24 REPORTED BY: HOLLY THUMAN, CSR No. 6834, RMR, CRR

25

(BO-130556)

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[REDACTED]

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[REDACTED]

15

THE WITNESS: No.

16

BY MR. GODKIN:

17

Q. Are you aware of any complaints against

18

Six4Three sent from anyone to Facebook during that same

19

time period?

20

MS. MILLER: Objection. Outside the scope.

21

THE WITNESS: No.

22

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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Q. Okay. Are you aware of Facebook ever
notifying Six4Three from 2012 to 2014 that Six4Three
had violated any of the subsections of paragraph 9?

MS. MILLER: Objection. Outside the scope and
calls for speculation.

THE WITNESS: I'm not aware of us having any
enforcement communication with Pikinis.

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Q. If you turn to the next page of Exhibit 9.

10

There's a question, "How will Facebook deal with

11

applications that compete with one another or even

12

compete with Facebook-built applications?"

13

Do you see that?

14

A. I do.

15

Q. And the answer reads, quote:

16

"We welcome developers with competing

17

applications, including developers whose

18

applications might compete with Facebook-built

19

applications. Many applications are likely to

20

offer similar features. We have designed

21

Facebook Platform so that applications from

22

third-party developers are on a level playing

23

field with applications built by Facebook.

24

Ultimately, our users will decide which

25

applications they find most useful, and it is

1 these applications that will become most
2 popular."

3 Did I read that correctly?

4 A. You did.

5 Q. Does Facebook state in the answer to this
6 question that it can provide special access to data to
7 certain developers but not others?

8 MS. MILLER: Objection. Outside the scope and
9 argumentative. And vague as to what "special access"
10 means.

11 THE WITNESS: This document does not state
12 that.

13 BY MR. GODKIN:

14 Q. Does it state that Facebook can remove access
15 to data to an app that has not violated Facebook's
16 policies even though that data will be available to all
17 other developers?

18 MS. MILLER: Objection. Outside the scope and
19 argumentative.

20 THE WITNESS: So to qualify my last response,
21 I mean this FAQ doesn't state that. If I wanted to be
22 perfect, I'd read this and make sure that was an
23 accurate response.

24 And so for this question -- can you just state
25 it?

EXHIBIT 5

UNSEALED VERSION OF DOCUMENT PURSUANT TO THE NOVEMBER 1, 2018 ORDER

1 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
2 IN AND FOR THE COUNTY OF SAN MATEO

3 ---oOo---

4 SIX4THREE, LLC, a Delaware
5 limited liability company,

6 Plaintiff,

7 vs. Case No. CIV. 533328

8 FACEBOOK, INC., a Delaware
9 corporation and DOES 1
through 50, inclusive,

10 Defendant.

11 _____/

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14

15 ***CONFIDENTIAL***

16

17 VIDEOTAPED DEPOSITION OF

18 KONSTANTINOS PAPAMILTIDIS

19

20 VOLUME 1; PAGES 1 - 263

21 FRIDAY, SEPTEMBER 1, 2017

22

23

24

25 REPORTED BY: HOLLY THUMAN, CSR No. 6834, RMR, CRR

(BO-140738)

14 Q. You have in front of you a document that's
15 been marked Exhibit 14. It's an email thread. The
16 top email is from you, dated August 15, 2013.
17 Have you seen this email thread before
18 today?
19 A. Are we looking at the same? August 15th.
20 Right?
21 MS. MILLER: Yeah.
22 MR. FTHENAKIS: Did I say something --
23 THE WITNESS: I think you said 13th. No?
24 Okay, sorry.
25 //

1 BY MR. FTHENAKIS:

2 Q. You've seen that before today?

3 A. I'm the author, so I suspect I've seen it
4 before, yes.

5 Q. If you would direct your attention to
6 page -53.

7 A. Yes.

8 Q. Does this refresh your recollection that
9 Mr. Archibong asked you and Mr. Cross for a
10 comprehensive review of the Platform APIs and
11 permissions that will be impacted by Platform 3.0,
12 as he called it?

13 A. Yes.

14 Q. And then he also wanted all the private
15 whitelisted APIs that will be impacted.

16 A. This -- I guess the request after -- next
17 to bullet point 1, yes.

18 Q. He also tells you that Mr. Daniels wants
19 to pull this together to share with Zuck.

20 Is that Mark Zuckerberg, as far as you
21 know?

22 A. That's definitely the nickname used for
23 Zuckerberg, so I suspect that's who they are
24 referring to.

25

[REDACTED]

EXHIBIT 6

UNSEALED VERSION OF DOCUMENT PURSUANT TO THE NOVEMBER 1, 2018 ORDER

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SUPERIOR COURT OF CALIFORNIA
COUNTY OF SAN MATEO
-----x
SIX4THREE, LLC, a Delaware limited :
liability company, :
Plaintiff : Case No.:
v. : CIV 533328
FACEBOOK, INC., a Delaware :
Corporation and DOES 1 through 50, :
Inclusive :
Defendants :
-----x

Videotaped Deposition of BERNARD HOGAN, Ph.D.
Washington, D.C.
Wednesday, July 26, 2017
12:47 p.m.

Job No.: BO-132111
Pages 1 - 346
Reported by: Melissa Mandell

SUPERIOR COURT OF CALIFORNIA

COUNTY OF SAN MATEO

SIX4THREE, LLC, a Delaware
limited liability company,

Plaintiff,

v.

FACEBOOK, INC., a Delaware
corporation and DOES 1
through 50, inclusive,

Defendants.

Case No. CIV 533328

CONFIDENTIAL

Videotaped deposition of BERNARD HOGAN, PH.D.

(Volume II, pages 347 - 469 inclusive)

London, England

Thursday, October 26, 2017

Reported by:
Leah Willersdorf,
ACR, MBIVR, QRR2,
International Participating
Member NCRA.

Job No. 10036637

1 paragraph -- or number eight on that page. Do you 01:37:36
2 recall that? 01:37:38

3 A. Yes. 01:37:39

4 Q. So what did you understand paragraph eight 01:37:39
5 to mean? 01:37:42

6 MS. MEHTA: Objection; foundation, calls 01:37:44
7 for a legal conclusion, purports to call for expert 01:37:45
8 opinion from a lay witness, irrelevant. 01:37:49

9 A. So when I was developing applications on 01:37:52
10 Facebook, part of that required me to sort of look 01:37:56
11 at Facebook's code. There are things called 01:37:59
12 packages, for example. Packages are ways in which 01:38:03
13 we can use a programming language. I had previously 01:38:07
14 identified I teach one called Python. So there's a 01:38:10
15 Python package for -- that helps you access Facebook 01:38:14
16 data. You submit the appropriate credentials and 01:38:18
17 then you can get the appropriate data. Facebook had 01:38:22
18 offered some various code and endpoints on their 01:38:26
19 websites. I understood this to mean that if they 01:38:31
20 had offered it for me to use as a developer, then I 01:38:36
21 could use it as a developer. 01:38:40

22 Q. Earlier in the deposition, you made 01:38:42
23 reference to something called FQL. Do you recall 01:38:44
24 that? 01:38:47

| | | |
|----|--|----------|
| 1 | So Graph Search seemed like it would be a | 01:53:26 |
| 2 | way to simplify this task of querying Facebook for | 01:53:29 |
| 3 | this data and showing that data to the user. | 01:53:32 |
| 4 | Q. You testified a few minutes ago regarding | 01:53:36 |
| 5 | limitations on the amount of data that could be | 01:53:42 |
| 6 | queried. Do you recall that? | 01:53:46 |
| 7 | A. Yes, I do. | 01:53:49 |
| 8 | Q. Is there a technical term for that that | 01:53:49 |
| 9 | you're familiar with? | 01:53:52 |
| 10 | A. Oh you're -- are you -- | 01:53:53 |
| 11 | MS. MEHTA: Objection -- hold on. | 01:53:54 |
| 12 | THE WITNESS: Oh, I'm sorry. | 01:53:56 |
| 13 | MS. MEHTA: Objection; calls for | 01:53:57 |
| 14 | speculation, foundation, purports to call for expert | 01:53:57 |
| 15 | testimony from a lay witness. Now you can go ahead. | 01:54:00 |
| 16 | A. So I had originally -- or I had previously | 01:54:05 |
| 17 | spoke about the fact that you could only get 5,000 | 01:54:08 |
| 18 | friendships back from a single query. That's a kind | 01:54:13 |
| 19 | of limiting. So you can limit the data -- or data | 01:54:16 |
| 20 | is limited by a platform in a number of different | 01:54:20 |
| 21 | ways, but mainly it's volume and velocity. So | 01:54:23 |
| 22 | volume is limiting how much data the developer or | 01:54:30 |
| 23 | the developer's application -- sorry -- volume is | 01:54:36 |
| 24 | how much data the application can receive. Velocity | 01:54:40 |

| | | |
|----|--|----------|
| 1 | is how fast -- velocity is how fast the data can be | 01:54:45 |
| 2 | queried. | 01:54:51 |
| 3 | So 5,000 is an example of volume. You can | 01:54:52 |
| 4 | only receive so much data per query. Velocity is | 01:54:55 |
| 5 | how many queries you can make under a specific time | 01:55:00 |
| 6 | period, and that's call rate limiting. So a lot of | 01:55:04 |
| 7 | platforms have rate limiting baked in and we | 01:55:07 |
| 8 | commonly consult documents to see what that rate | 01:55:12 |
| 9 | limiting is. Twitter, for example; if you wanted to | 01:55:16 |
| 10 | get friendships from Twitter, that's the get friends | 01:55:20 |
| 11 | permission, and you can only query that, I believe, | 01:55:24 |
| 12 | 180 times every 15 minutes. And so after you've | 01:55:26 |
| 13 | queried it 180 times -- say, give me the first set | 01:55:38 |
| 14 | of friends, give me the second batch of friends, | 01:55:43 |
| 15 | give me the third batch of friends -- once you get | 01:55:43 |
| 16 | to 180, you have to stop and wait until your 15 | 01:55:45 |
| 17 | minutes are up and then continue. Facebook have | 01:55:49 |
| 18 | rate limiting as well, although I do not recall any | 01:55:54 |
| 19 | specific document from Facebook that stipulated | 01:55:58 |
| 20 | precisely their rate limiting. But I do know that | 01:56:01 |
| 21 | they do rate limit and that we had to ensure that | 01:56:05 |
| 22 | our program did not ask Facebook too quickly for | 01:56:09 |
| 23 | data or else no data would be returned. | 01:56:15 |
| 24 | MS. MEHTA: Objection; move to strike, | 01:56:19 |

1 nonresponsive. 01:56:19

2 Q. Does the -- or did the Facebook Statement 01:56:21
3 of Rights and Responsibilities have anything, any 01:56:23
4 provisions in it regarding rate limiting? 01:56:27

5 MS. MEHTA: Objection -- 01:56:31

6 A. I don't -- 01:56:33

7 MS. MEHTA: Hold on. Objection; vague, 01:56:33
8 foundation, calls for speculation, purports to call 01:56:33
9 for expert testimony from a lay witness, and 01:56:37
10 irrelevant. 01:56:40

11 A. I don't recall the phrase rate limiting in 01:56:44
12 the Statement of Rights and Responsibilities, but I 01:56:46
13 do know that in the Statement of Rights and 01:56:50
14 Responsibilities they do refer to limiting. Whether 01:56:51
15 that refers to the volume of data or the velocity of 01:56:54
16 data or both, I don't know. 01:57:00

17 Q. And do you still have Exhibit 1 in front 01:57:04
18 of you? 01:57:07

19 A. I do. 01:57:07

20 Q. Is it open to page 21? 01:57:09

21 A. Oh, yes. 01:57:10

22 Q. And again on the previous page 20, this is 01:57:13
23 section nine entitled Special Provisions Applicable 01:57:17
24 to Developers/Operators of Applications and 01:57:22

| | | |
|----|--|----------|
| 1 | Websites, correct? | 01:57:25 |
| 2 | A. Uh-huh. | 01:57:26 |
| 3 | Q. And then on page 21, number nine up there | 01:57:27 |
| 4 | at the top states, "we can limit your access to | 01:57:30 |
| 5 | data." Do you see that? | 01:57:33 |
| 6 | A. Yes. | 01:57:35 |
| 7 | Q. What is your understanding or what was | 01:57:37 |
| 8 | your understanding of what that meant when you read | 01:57:37 |
| 9 | it the first time? | 01:57:40 |
| 10 | MS. MEHTA: Hold on. Objection; vague, | 01:57:42 |
| 11 | foundation, calls for speculation, calls for a legal | 01:57:43 |
| 12 | conclusion, expert testimony from a lay witness, and | 01:57:47 |
| 13 | irrelevant. | 01:57:49 |
| 14 | A. When I read that phrase, which was | 01:57:53 |
| 15 | important to me because I obviously wanted to abide | 01:57:55 |
| 16 | by the rights and responsibilities -- I didn't want | 01:57:59 |
| 17 | them to, you know, revoke my access or restrict my | 01:58:02 |
| 18 | access -- I assumed that that meant that they can | 01:58:09 |
| 19 | either limit -- as in give me only so much data -- | 01:58:15 |
| 20 | in terms of volume or rate limit, as in only give it | 01:58:19 |
| 21 | to me so fast. | 01:58:24 |
| 22 | Q. And what is it about that sentence that | 01:58:25 |
| 23 | led you to believe that that's what it meant? | 01:58:31 |
| 24 | MS. MEHTA: Same objections. | 01:58:35 |

1 A. Nothing really. I mean, the word limit is 01:58:36
2 there, but also it's not the sentence that gave me 01:58:39
3 that impression. It's the fact that I 01:58:42
4 download social network data from a variety of 01:58:44
5 sources and that I was interpreting this in line 01:58:48
6 with the similar statements from Twitter or LinkedIn 01:58:52
7 or other platforms -- Reddit, for example -- that 01:58:56
8 also limit data in specific ways. 01:59:00

9 Q. Did the word limit have particular 01:59:04
10 significance to you? 01:59:07

11 MS. MEHTA: Same objections, asked and 01:59:09
12 answered. 01:59:10

13 A. You mean, to the extent that it made me 01:59:12
14 think of rate limiting or limiting by volume? 01:59:16

15 Q. Did you understand when you read this 01:59:20
16 sentence that we're talking about that it gave 01:59:21
17 Facebook the right to terminate access to data at 01:59:25
18 some period in time? 01:59:31

19 MS. MEHTA: Same objections. 01:59:33

20 A. So not in this statement. This statement 01:59:34
21 to me seems like -- that they could slow down data. 01:59:37
22 And also as my work evolved and I'm sort of using 01:59:40
23 Facebook more for more kinds of data, that just 01:59:48
24 reinforced my understanding of that. So the fact 01:59:54

1 that they said, we'll only give you 5,000 01:59:58
2 friendships at a time, or that you can only do, I 02:00:01
3 believe, 60 queries in 60 seconds. I think that's 02:00:04
4 their rate limit. I don't -- I can't confirm that. 02:00:08
5 But that's -- so the fact that they had limited data 02:00:12
6 in some ways and that they said that they limit 02:00:15
7 access to data, that just seemed to make sense to 02:00:20
8 me. 02:00:24

9 Q. At any point in time, say, up until the 02:00:24
10 date of this document, which is December of 2012, 02:00:29
11 did you have an understanding that Facebook was 02:00:33
12 reserving the right to cut off access to data 02:00:37
13 completely? 02:00:41

14 MS. MEHTA: Same objections. 02:00:43

15 A. I do not know if I had read anywhere in 02:00:46
16 particular that that's the case, but I had assumed 02:00:49
17 that if you did not abide by these terms and 02:00:52
18 conditions, they would revoke your developer key. 02:00:55
19 The developer key is what allows you to talk to 02:00:59
20 Facebook. And so I had assumed that at some point, 02:01:02
21 if you don't abide by these conditions, they would 02:01:03
22 revoke that. 02:01:07

23 Q. What was your understanding if you did 02:01:09
24 abide by their rules and regulations? 02:01:11

| | | |
|----|--|----------|
| 1 | MS. MEHTA: Same objections. | 02:01:15 |
| 2 | A. That I would -- that developers would be | 02:01:16 |
| 3 | treated fairly, that they would be able to access | 02:01:19 |
| 4 | the data that is stipulated by Facebook as being | 02:01:21 |
| 5 | accessible. | 02:01:26 |
| 6 | Q. And you've testified a little bit about | 02:01:29 |
| 7 | two apps that you developed. What were the names of | 02:01:33 |
| 8 | those apps? | 02:01:38 |
| 9 | A. One is call NameGenWeb and that's -- the | 02:01:39 |
| 10 | reason it's called that is because in social network | 02:01:42 |
| 11 | analysis, the technique for eliciting friendships is | 02:01:47 |
| 12 | called a name generator. And so I'd say, how many | 02:01:51 |
| 13 | people do you know? How many people do you know | 02:01:55 |
| 14 | that are important to you? That's a name generator | 02:01:57 |
| 15 | question. So this being an online version of that, | 02:02:00 |
| 16 | I called it NameGenWeb. | 02:02:03 |
| 17 | The other application is called College | 02:02:07 |
| 18 | Connect, and that's because it's about connecting | 02:02:08 |
| 19 | people to their friends in such a way that they | 02:02:15 |
| 20 | could learn more about colleges. | 02:02:19 |
| 21 | Q. Just to put a timeframe on this, | 02:02:22 |
| 22 | approximately when did you develop NameGenWeb? | 02:02:24 |
| 23 | A. So NameGenWeb started in -- definitely at | 02:02:28 |
| 24 | least in 2008. While I was still at the University | 02:02:32 |

| | | |
|----|---|----------|
| 1 | it as? | 02:06:50 |
| 2 | MS. MEHTA: Objection; foundation, | 02:06:51 |
| 3 | speculation. | 02:06:51 |
| 4 | A. So I'm not entirely sure if your mean this | 02:06:54 |
| 5 | but -- | 02:06:58 |
| 6 | Q. Let me ask a different question. | 02:06:59 |
| 7 | A. Sure. | 02:07:00 |
| 8 | Q. Are you familiar with something call Graph | 02:07:00 |
| 9 | API Version 2? | 02:07:02 |
| 10 | A. Two, yes. | 02:07:05 |
| 11 | MS. MEHTA: Objection; leading. | 02:07:06 |
| 12 | A. I am familiar with Graph API Version 2. | 02:07:07 |
| 13 | Q. And what is your understanding of what | 02:07:09 |
| 14 | Graph API Version 2 or 2.0 is? | 02:07:11 |
| 15 | MS. MEHTA: Objection; foundation, | 02:07:15 |
| 16 | speculation, purports to call for expert testimony | 02:07:15 |
| 17 | from a lay witness, and irrelevant. | 02:07:19 |
| 18 | A. So what they announced in 2014 was Graph | 02:07:22 |
| 19 | API 2.0. Previously, when I was discussing a change | 02:07:27 |
| 20 | in 2010, that was Graph API 1.1. Graph API 2.0 is | 02:07:31 |
| 21 | the change or the ensemble of changes to the way | 02:07:38 |
| 22 | that a application can talk to Facebook that led to | 02:07:43 |
| 23 | the sort of way I couldn't do my work anymore. | 02:07:47 |
| 24 | Q. And just so that the record is clear, can | 02:07:52 |

1 you explain, what was it about this announcement 02:07:55
2 that caused you not to be able to do your work 02:07:59
3 anymore? 02:08:02

4 MS. MEHTA: Objection; assumes facts not 02:08:03
5 in evidence and same objections as prior. 02:08:05

6 A. The announcement didn't prevent me from 02:08:08
7 doing my work. The changes prevented me from doing 02:08:12
8 my work. They happened a year later. So I still 02:08:13
9 had one year where both NameGenWeb was available and 02:08:16
10 College Connect was available. But the changes, 02:08:22
11 when they happened, they prevented me from accessing 02:08:24
12 friendship relations on behalf of a user. 02:08:30

13 Q. And what changes took effect in April of 02:08:34
14 2015? 02:08:38

15 A. So in April of 2015, that was the changes. 02:08:38
16 First of all, it required the get friends 02:08:42
17 permission, but that's okay. We could have, you 02:08:44
18 know, just added that permission in if it gave the 02:08:47
19 equivalent data, but it did not give the equivalent 02:08:51
20 data. Instead, it only gave data about friends that 02:08:54
21 also authorized an application. 02:08:58

22 So as an example, you could see -- so 02:09:00
23 let's say I want to make a wedding planner. Before, 02:09:04
24 you could, say, have a whole list of a person's 02:09:08

1 friendships and then you could select which one's 02:09:13
2 going to be the photographer, which ones' going to 02:09:15
3 be the bridesmaids, and which ones are invited or 02:09:17
4 not invited. Now, if you wanted to do a wedding 02:09:21
5 planner, you would have to say, hey, every single 02:09:24
6 one of my friends on Facebook, please add this 02:09:28
7 application so that I can make a wedding planner. 02:09:31

8 Q. Why is that a problem? 02:09:36

9 MS. MEHTA: Objection; purports to call 02:09:38
10 for expert opinion from a lay witness, irrelevant, 02:09:39
11 foundation, speculation. 02:09:41

12 A. For the case of a wedding planner, it 02:09:45
13 would be a minor inconvenience perhaps. It would 02:09:48
14 slow the app down. It would make it somewhat 02:09:55
15 inconvenient. In my case, where I'm trying to show 02:09:57
16 all of a user's friends or almost all of a user's 02:10:02
17 friends back to that user, there is no reasonable 02:10:04
18 way that I would be able to spam a user's friends to 02:10:08
19 say, you should also add this application so that 02:10:14
20 your friend can visualize their social network. 02:10:18
21 It's just a sort of interaction that's not very -- 02:10:21
22 not very common, not very meaningful. Just it's 02:10:24
23 something that would be inappropriate. 02:10:30

24 Facebook have themselves tried to prevent 02:10:33

1 spamming on their site. There was a time, say five 02:10:36
2 years ago, when companies like Zynga, who owned 02:10:39
3 Farmville, would post all sorts of Farmville 02:10:44
4 invitations on a person's wall. And that was 02:10:48
5 considered very distasteful and most people did not 02:10:52
6 like that. So employing that practice would only 02:10:55
7 inhibit my work either because Facebook would 02:10:59
8 perceive it as spamming or because people in a 02:11:04
9 person's social network would consider it as 02:11:07
10 inappropriate. 02:11:09

11 Q. And so what happened on April -- was it 02:11:11
12 April 30th, 2015? 02:11:14

13 A. I believe it was -- 02:11:18

14 MS. MEHTA: Objection; vague and prior 02:11:18
15 objections. 02:11:20

16 A. Yes. 02:11:20

17 Q. What happened on April 30th, 2015 with 02:11:22
18 respect to your two apps, NameGenWeb and College 02:11:27
19 Connect? 02:11:29

20 MS. MEHTA: Objection; calls for expert 02:11:31
21 opinion from a lay witness, vague, and irrelevant. 02:11:31

22 A. So approximately April 30th, 2015, if I 02:11:36
23 was to query Facebook for the friendships of an 02:11:41
24 individual or -- I mean, I'm not querying it. My 02:11:47

| | | |
|----|--|----------|
| 1 | application is querying it on behalf of a user. If | 02:11:50 |
| 2 | my application is querying Facebook, it would return | 02:11:51 |
| 3 | no data. Facebook had notified myself and other | 02:11:56 |
| 4 | developers of this through a thing called Breaking | 02:12:03 |
| 5 | Changes. And so we were well aware of the fact that | 02:12:06 |
| 6 | our app would no longer work because our app used | 02:12:11 |
| 7 | queries that would no longer function. | 02:12:14 |
| 8 | MR. GODKIN: Let me now ask the court | 02:12:18 |
| 9 | reporter to mark as Exhibit Number 2 this document. | 02:12:20 |
| 10 | (Exhibit 2 was marked for identification | 02:12:44 |
| 11 | and was attached to the transcript). | 02:12:45 |
| 12 | Q. Placed in front of you, we've marked as | 02:12:45 |
| 13 | Hogan Exhibit 2, Dr. Hogan. Can you identify Hogan | 02:12:49 |
| 14 | Exhibit 2? | 02:12:51 |
| 15 | A. Yes. This is a paper that I wrote for a | 02:12:52 |
| 16 | conference called Quantitative Methods in the Social | 02:12:55 |
| 17 | Sciences 2. This conference took place at the | 02:13:00 |
| 18 | University of Amsterdam and this was the paper that | 02:13:03 |
| 19 | I submitted which was a way of introducing the | 02:13:07 |
| 20 | ability to represent a person's social network via | 02:13:13 |
| 21 | Facebook. I use this -- in this paper, I describe | 02:13:19 |
| 22 | how certain connections, certain friendships in my | 02:13:23 |
| 23 | friendship network were more important to me, more | 02:13:30 |
| 24 | personally important and that they could be | 02:13:34 |

1 identified through various statistical means that 02:13:37
2 are available to social network researchers. 02:13:45
3 Q. And if you turn to -- strike that. 02:13:53
4 What is the date of this publication? 02:13:58
5 A. This publication is not dated but it -- 02:14:01
6 Q. If you look at the second page. 02:14:04
7 A. Oh, well. Yeah, I was going to say it was 02:14:07
8 December 2nd, but it's actually -- yes, it says here 02:14:07
9 December 1st, 2008. 02:14:10
10 Q. Is this the first publication that you 02:14:11
11 authored concerning Facebook -- 02:14:15
12 MS. MEHTA: Irrelevant. 02:14:19
13 Q. -- or were there other ones? 02:14:19
14 MS. MEHTA: Irrelevant. 02:14:21
15 A. It's reasonable to assume that previous 02:14:23
16 publications that I have authored, particularly one, 02:14:26
17 a book chapter called "Using Information Networks to 02:14:30
18 Elicit Social Behavior" or something to that 02:14:35
19 nature -- it's in the book the Handbook of Online 02:14:40
20 Research Methods by Fielding, Lee, and Blank -- it's 02:14:43
21 reasonable to assume that I would have mentioned 02:14:50
22 Facebook in that document. But this is the first 02:14:53
23 document where I am doing research explicitly on 02:14:57
24 Facebook. 02:15:01

1 Q. At the time you wrote this article, do you 02:15:03
2 know approximately how many people were using 02:15:07
3 Facebook as a social network? 02:15:10

4 MS. MEHTA: Objection; foundation, calls 02:15:13
5 for speculation, purports to call for expert opinion 02:15:14
6 from a lay witness. 02:15:17

7 A. Approximately this time, I believe around 02:15:20
8 170 to 200 million people were -- had joined 02:15:25
9 Facebook. It may be more. 02:15:29

10 Q. On the second page of the article, there's 02:15:35
11 a Roman numeral three which is entitled Other 02:15:42
12 Network Data Available Through Facebook. Do you see 02:15:46
13 that? 02:15:50

14 A. Yes, I do. 02:15:50

15 Q. At then at the top of the second column, 02:15:51
16 item number one is photos. 02:15:52

17 A. Yes. 02:15:55

18 Q. Were photos a type of data that was made 02:15:56
19 available on the Facebook platform? 02:16:02

20 MS. MEHTA: Same objections. 02:16:05

21 A. Yes, that is the case. Photo data was 02:16:06
22 available, and you can see here I've discussed 02:16:07
23 various applications other than mine that have used 02:16:11
24 that data. 02:16:13

1 Q. And did you ever use photos in any of your 02:16:14
2 applications? 02:16:18

3 MS. MEHTA: Same objections. 02:16:21

4 A. I used profile photos in one of my 02:16:22
5 research endeavors. It was not by me in particular 02:16:25
6 but it was by a student I had mentored. 02:16:29

7 Q. And who was that student? 02:16:33

8 A. Her name was Nina Jones and she was a high 02:16:33
9 school student. I was approached in, I believe, 02:16:35
10 2011 by the BBC. They were running -- 02:16:39

11 Q. British Broadcasting Company? 02:16:44

12 A. Yes, by the British Broadcasting Company, 02:16:47
13 sort of a major broadcaster in the United Kingdom, 02:16:49
14 and they have both television channels -- BBC1, 02:16:53
15 BBC2 -- and radio stations -- Radio 1 and so forth. 02:16:58
16 Radio 4 is their station for like news, current 02:17:03
17 affairs, scientific programs, documentaries. Radio 02:17:08
18 4 was running a program called So You Want To Be A 02:17:12
19 Scientist, and people would apply to be a scientist. 02:17:15
20 It was a competition. The lady who won it found out 02:17:21
21 how far snails go before they can return -- before 02:17:25
22 they know -- to lose their way. 02:17:31

23 Nina was also in this competition and she 02:17:32
24 made it to the finals. Her project was analyzing 02:17:33

1 Facebook profile photos. So these profile photos, 02:17:38
2 she coded them for whether people were smiling, 02:17:43
3 whether there were even people in the photos, or 02:17:45
4 there were cartoons and so forth. And then we did 02:17:48
5 an analysis to reveal some features about these 02:17:50
6 photos. And so for example, we found that women 02:17:54
7 were more likely to smile in their photos than men. 02:17:56

8 Q. And were you her supervisor or mentor or 02:18:01
9 what were you? 02:18:05

10 A. I was her mentor through this. She was a 02:18:06
11 high school student. The purpose of this program 02:18:08
12 was to help laypeople who don't have an experience 02:18:11
13 or background in science to accomplish a scientific 02:18:15
14 proposal. 02:18:19

15 Q. Back at the sentence we were looking at -- 02:18:21
16 or the item regarding photos, you wrote, "Facebook 02:18:24
17 does not merely enable individuals to upload photos 02:18:27
18 but to tag these photos with other individuals who 02:18:30
19 are present in the photos." What was the 02:18:33
20 significance of that? 02:18:35

21 MS. MEHTA: Objection; vague, foundation, 02:18:40
22 speculation, and irrelevant. 02:18:41

23 A. Part of this work was to introduce the 02:18:51
24 opportunity to do research on Facebook and to 02:18:54

| | | |
|----|--|----------|
| 1 | indicate -- partially to justify why I'm doing this. | 02:19:00 |
| 2 | At this point, people would say, why are you doing | 02:19:04 |
| 3 | work on Facebook? It's just an online website. | 02:19:05 |
| 4 | It's not important like real life, or something like | 02:19:09 |
| 5 | that. These days we tend to assume Facebook is a | 02:19:10 |
| 6 | part of real life. | 02:19:15 |
| 7 | So in that, I introduced not only the work | 02:19:16 |
| 8 | that I was doing but also to highlight other work | 02:19:19 |
| 9 | that was being done on Facebook. In academic work, | 02:19:24 |
| 10 | we call this part of our literature review. That | 02:19:27 |
| 11 | way, we have to show that we're part of a field and | 02:19:31 |
| 12 | not just doing whatever we feel like. Previously, | 02:19:34 |
| 13 | there was a paper that has used photos on Facebook | 02:19:36 |
| 14 | and used the fact that individuals could be | 02:19:41 |
| 15 | identified in photos on Facebook in order to | 02:19:43 |
| 16 | generate scientific insights. So the insight that | 02:19:45 |
| 17 | they generated in this paper, the insight that I | 02:19:45 |
| 18 | refer to, is the fact that you may have many | 02:19:52 |
| 19 | friendship relations, hundreds even, but people tend | 02:19:56 |
| 20 | to have many fewer people identified in their own | 02:20:00 |
| 21 | photos and that that was an interesting insight at | 02:20:04 |
| 22 | the time. | 02:20:08 |
| 23 | Q. And then turn if you would to page number | 02:20:10 |
| 24 | four of your article. | 02:20:25 |

1 A. Okay, I see that, yes.

02:20:27

2 Q. You see that? And there's -- you have
3 section five entitled Employing the Facebook API.

02:20:28

02:20:30

4 A. Yes.

02:20:36

5 Q. And you state "the Facebook API is
6 designed to facilitate access to data about a user
7 and the user's friends." Can you explain what you
8 meant by that?

02:20:36

02:20:38

02:20:44

02:20:49

9 MS. MEHTA: Objection; irrelevant.

02:20:51

10 A. Well, that sentence means that -- or the
11 intent of me saying that is indicating that Facebook
12 have put in place a mechanism by which an
13 application can legitimately receive data from
14 Facebook. This is important to state because at the
15 time there were many questions about whether you
16 could access data from Facebook, first, and second
17 of all, what are the appropriate ways to do it. So
18 some people were trying to get data by, say,
19 photographing what's on the screen or downloading
20 what's on the screen, which is called screen
21 scraping. People were trying to use all sorts of
22 hacks to get into Facebook. But this I had
23 considered because it was based on the Statement of
24 Rights and Responsibilities and because it was so

02:20:54

02:21:00

02:21:04

02:21:07

02:21:12

02:21:15

02:21:18

02:21:21

02:21:24

02:21:27

02:21:31

02:21:35

02:21:38

02:21:42

02:21:43

| | | |
|----|---|----------|
| 1 | clearly laid out that the Facebook API was the sort | 02:21:47 |
| 2 | of preferred way to get data. | 02:21:51 |
| 3 | Q. And then you go on in this paragraph to | 02:21:54 |
| 4 | talk about queries which we discussed earlier -- | 02:21:57 |
| 5 | A. Yes. | 02:22:03 |
| 6 | Q. -- correct? And one of them -- you | 02:22:03 |
| 7 | mentioned FQL. | 02:22:04 |
| 8 | A. Uh-huh. | 02:22:06 |
| 9 | Q. Do you see that? | 02:22:08 |
| 10 | A. Yes. | 02:22:09 |
| 11 | Q. Which is a restricted variant of the | 02:22:09 |
| 12 | commonly used SQL; correct? | 02:22:10 |
| 13 | A. Uh-huh. | 02:22:13 |
| 14 | Q. You need to say yes or no. | 02:22:14 |
| 15 | A. Yes. | 02:22:16 |
| 16 | Q. Sorry, Dr. Hogan. And then you drop a | 02:22:16 |
| 17 | footnote, "Special thanks are extended to Cameron | 02:22:20 |
| 18 | Marlow for providing guidance on this query." Do | 02:22:24 |
| 19 | you see that? | 02:22:27 |
| 20 | A. Yes, I see that. | 02:22:27 |
| 21 | Q. Now, is that the same Cameron Marlow that | 02:22:28 |
| 22 | you testified about earlier -- | 02:22:31 |
| 23 | A. That is correct. | 02:22:33 |
| 24 | Q. -- who worked for Facebook? | 02:22:33 |

| | | |
|----|--|----------|
| 1 | to modify this query slightly. In later | 02:23:56 |
| 2 | presentations, I have presented a modified version | 02:24:00 |
| 3 | of this query. However, I would not have arrived at | 02:24:03 |
| 4 | that modified version had I not seen this initial | 02:24:07 |
| 5 | query. The query is quite funny looking and it's | 02:24:11 |
| 6 | that funny bit about select in, select where, select | 02:24:15 |
| 7 | stuff which I was not an expert on, and that was | 02:24:18 |
| 8 | what really helped. It made a material difference | 02:24:23 |
| 9 | in my capacity to download these friendship | 02:24:26 |
| 10 | relations. | 02:24:28 |
| 11 | MS. MEHTA: Objection; move to strike, | 02:24:30 |
| 12 | nonresponsive. | 02:24:31 |
| 13 | Q. And then if you turn to page six of this | 02:24:32 |
| 14 | publication, there's a Figure 1. | 02:24:35 |
| 15 | A. Yes. | 02:24:38 |
| 16 | MR. GODKIN: And then let me ask the court | 02:24:40 |
| 17 | reporter to mark as Exhibit 3 this document. | 02:24:41 |
| 18 | (Exhibit 3 was marked for identification | 02:24:42 |
| 19 | and was attached to the transcript.) | 02:24:42 |
| 20 | Q. And can you identify Exhibit 3? | 02:25:02 |
| 21 | A. Yes. Exhibit 3 is a -- this is a visual | 02:25:06 |
| 22 | representation of my social network, which is to say | 02:25:09 |
| 23 | those things I was talking about earlier, dots and | 02:25:14 |
| 24 | lines. Each dot represents a person and the lines | 02:25:17 |

| | | |
|----|--|----------|
| 1 | represent the friendships between those people. | 02:25:21 |
| 2 | This is a visualization of my social network that | 02:25:24 |
| 3 | uses certain technical principles in order to kind | 02:25:28 |
| 4 | of group people together. And in doing so, it makes | 02:25:34 |
| 5 | the visualization sort of tidy and helps me identify | 02:25:38 |
| 6 | clusters of people, such as one cluster, which is -- | 02:25:43 |
| 7 | say, that's my high school friends and they're all | 02:25:46 |
| 8 | connected to each other, and my family and they're | 02:25:48 |
| 9 | all connected to each other. | 02:25:49 |
| 10 | Q. And Exhibit 3 is the same as Figure 1 in | 02:25:52 |
| 11 | the article, Exhibit 2; is that right? | 02:25:56 |
| 12 | A. This is correct. It is a -- just a -- | 02:25:59 |
| 13 | simply it's just a larger version of that one. | 02:26:00 |
| 14 | Q. And what is the significance of the lines | 02:26:04 |
| 15 | going between the clusters? | 02:26:07 |
| 16 | A. So each line in this document represents a | 02:26:09 |
| 17 | friendship. So this would be one person here -- | 02:26:14 |
| 18 | that's my partner, and that right there -- and I met | 02:26:18 |
| 19 | my partner during undergraduate, and that's high | 02:26:20 |
| 20 | school. And so my partner knows people that I know | 02:26:23 |
| 21 | from high school, but my partner knows lots and lots | 02:26:27 |
| 22 | of people in undergraduate and also knows some | 02:26:30 |
| 23 | people in graduate school and so forth. So each | 02:26:31 |
| 24 | line is a friendship on Facebook that creates this | 02:26:35 |

| | | |
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| 1 | picture. | 02:26:38 |
| 2 | Q. It's a connection, if you will? | 02:26:39 |
| 3 | A. It is explicitly the friendship that you | 02:26:42 |
| 4 | get between two people on Facebook if you request to | 02:26:48 |
| 5 | be someone's friend and then they accept. That | 02:26:51 |
| 6 | connection can signify all sorts of things. It | 02:26:56 |
| 7 | could be a relationship -- people can befriend other | 02:27:00 |
| 8 | people because they want to appear popular or | 02:27:04 |
| 9 | because they feel social pressure. I can't tell you | 02:27:05 |
| 10 | the reasons why any two people are friends here, but | 02:27:08 |
| 11 | I can tell you that the connections themselves are | 02:27:12 |
| 12 | the data that comes from Facebook. | 02:27:14 |
| 13 | Q. And does Exhibit 3 represent the Facebook | 02:27:20 |
| 14 | data before or after April 30th, 2015? | 02:27:26 |
| 15 | A. Oh, this represents the sort of -- so this | 02:27:35 |
| 16 | is what I was referring to earlier. In this | 02:27:37 |
| 17 | document, you might see that -- and it's beforehand. | 02:27:39 |
| 18 | Before April 30th, all these people and their | 02:27:43 |
| 19 | friendship relations would be accessible to the | 02:27:47 |
| 20 | user. This is me. This is my friendship relations. | 02:27:51 |
| 21 | Every one of these people have been aware of this | 02:27:52 |
| 22 | document. I have posted versions of this on my | 02:27:56 |
| 23 | Facebook wall. My friends have commented on it and | 02:28:01 |
| 24 | so forth. After April 30th, I would have to ask | 02:28:02 |

| | | |
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| 1 | every single one of these people to add an | 02:28:05 |
| 2 | application just so I could make a picture like | 02:28:08 |
| 3 | this, and realistically that would never happen. | 02:28:12 |
| 4 | Q. Put that aside. | 02:28:17 |
| 5 | Have you ever visited Facebook's offices? | 02:28:23 |
| 6 | A. I have. | 02:28:31 |
| 7 | Q. And what was the -- strike that. | 02:28:33 |
| 8 | When did that happen? | 02:28:33 |
| 9 | A. That happened twice. The first time that | 02:28:36 |
| 10 | happened was when I was at a -- that happens -- | 02:28:37 |
| 11 | apologies, that happened three times. The first | 02:28:43 |
| 12 | time, I was -- it was probably 2012, 2013. I had | 02:28:48 |
| 13 | met with a user experience researcher named Paul | 02:28:56 |
| 14 | Adams and a researcher named Eytan Bakshy. We met | 02:29:00 |
| 15 | over lunch because I was in the area. | 02:29:07 |
| 16 | Paul Adams at the time was a user | 02:29:10 |
| 17 | experience researcher at Facebook who had used some | 02:29:12 |
| 18 | of my methodologies for capturing network data to do | 02:29:15 |
| 19 | pretests, particularly pretests when he was at | 02:29:20 |
| 20 | Google. And so he knew who I was and so he -- I | 02:29:24 |
| 21 | contacted him and he said, yeah, sure, come down to | 02:29:28 |
| 22 | Menlo. And I had lunch with him and Eytan. It was | 02:29:32 |
| 23 | the first time I had met Eytan Bakshy, but we had | 02:29:35 |
| 24 | previously been mutually aware of each other's work. | 02:29:38 |

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| 1 | A. No. | 02:55:10 |
| 2 | Q. Did you ever get notice that College | 02:55:11 |
| 3 | Connect was in violation of any Facebook policies, | 02:55:14 |
| 4 | for example? | 02:55:16 |
| 5 | A. No. | 02:55:19 |
| 6 | Q. Did you ever get notices that Facebook had | 02:55:19 |
| 7 | received complaints regarding College Connect? | 02:55:22 |
| 8 | MS. MEHTA: Objection; irrelevant. | 02:55:30 |
| 9 | A. No. | 02:55:30 |
| 10 | Q. Okay. Can you estimate the amount of | 02:55:31 |
| 11 | money that was invested to create the app before you | 02:55:35 |
| 12 | learned that Facebook was turning off access to the | 02:55:39 |
| 13 | data? | 02:55:44 |
| 14 | MS. MEHTA: Objection; vague and also | 02:55:46 |
| 15 | irrelevant. | 02:55:47 |
| 16 | A. Well, the -- there is obviously the | 02:55:48 |
| 17 | initial hundred thousand dollars that was outlaid. | 02:55:51 |
| 18 | That was -- that did not pay for the amount of time | 02:55:53 |
| 19 | that the academics had put into it, their own time | 02:56:00 |
| 20 | paid at their rates. It did not take into account | 02:56:02 |
| 21 | the in-kind support of my department, my | 02:56:07 |
| 22 | department's IT team, the server infrastructure. So | 02:56:08 |
| 23 | on top of the hundred thousand which was used for | 02:56:12 |
| 24 | development efforts, our trip to Detroit for field | 02:56:15 |

1 testing, our designer, there would probably be 02:56:19
2 another hundred thousand of in-kind support in terms 02:56:23
3 of time spent by myself and other colleagues on this 02:56:25
4 application. 02:56:29

5 Q. All right. Thank you. 02:56:31

6 MR. GODKIN: Let me ask the reporter to 02:56:32
7 mark as the next exhibit this document. This is 02:56:34
8 Hogan Exhibit 5. 02:56:36

9 (Exhibit 5 was marked for identification 02:56:54
10 and was attached to the transcript.) 02:56:55

11 Q. I've placed in front of you what's been 02:56:56
12 marked as Hogan Exhibit 5. Dr. Hogan, can you 02:56:59
13 identify this exhibit? 02:57:01

14 A. This appears to be a story on Facebook 02:57:05
15 describing the changes that happened when they 02:57:10
16 shifted towards Graph API 2.0. 02:57:14

17 Q. And what was the significance of this 02:57:19
18 announcement to the apps you had developed? 02:57:24

19 MS. MEHTA: Objection; lacks foundation 02:57:29
20 and also irrelevant. 02:57:30

21 A. This particular document, if -- as I 02:57:33
22 understand it, because it is describing the changes 02:57:36
23 in Graph API 2.0 and other subsequent changes -- 02:57:41
24 would indicate that there were changes to the API. 02:57:49

| | | |
|----|--|----------|
| 1 | a heading, "A more stable platform with Versioning | 03:01:26 |
| 2 | and Graph API 2.0." Do you see that? | 03:01:31 |
| 3 | A. Uh-huh. | 03:01:34 |
| 4 | Q. Yes? | 03:01:34 |
| 5 | A. I see that, yes. | 03:01:35 |
| 6 | Q. And then it goes on to talk about | 03:01:37 |
| 7 | important new elements of Graph API 2.0 at the | 03:01:42 |
| 8 | bottom of the page. | 03:01:43 |
| 9 | A. That is -- I see that, yes. | 03:01:45 |
| 10 | Q. And then at the top of the next page, it | 03:01:47 |
| 11 | says, "In addition to the above, we were removing | 03:01:50 |
| 12 | several rarely used API endpoints; visit our | 03:01:54 |
| 13 | changelog for details." | 03:01:58 |
| 14 | A. Yes. | 03:02:01 |
| 15 | Q. Do you see that? | 03:02:01 |
| 16 | A. I see that. | 03:02:03 |
| 17 | MS. MEHTA: Objection; foundation. | 03:02:03 |
| 18 | MR. GODKIN: Okay. That he sees it? | 03:02:06 |
| 19 | MS. MEHTA: What -- the highlighting | 03:02:08 |
| 20 | that's on this version in gray -- | 03:02:10 |
| 21 | MR. GODKIN: I don't know. | 03:02:11 |
| 22 | MS. MEHTA: -- is that your highlighting | 03:02:12 |
| 23 | or is that original to the document? | 03:02:13 |
| 24 | MR. GODKIN: I can't answer that. | 03:02:17 |

| | | |
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| 1 | MS. MEHTA: Okay. I object to the use of | 03:02:18 |
| 2 | highlighted documents. This isn't the form in which | 03:02:19 |
| 3 | the document was produced. | 03:02:21 |
| 4 | BY MR. GODKIN | 03:02:22 |
| 5 | Q. Do you see any explanation of what the | 03:02:26 |
| 6 | several rarely used API endpoints are that appear on | 03:02:30 |
| 7 | this page of Exhibit 5? | 03:02:36 |
| 8 | MS. MEHTA: Objection; lacks foundation. | 03:02:38 |
| 9 | A. I do not see that stipulated here. I do | 03:02:41 |
| 10 | recall myself reviewing the changelog for the | 03:02:43 |
| 11 | details. | 03:02:48 |
| 12 | Q. And the changelog appears in Exhibit 5 -- | 03:02:48 |
| 13 | A. Oh, okay. | 03:02:53 |
| 14 | Q. -- farther back, does it not? | 03:02:53 |
| 15 | MS. MEHTA: Objection; lacks foundation. | 03:02:55 |
| 16 | A. Do you see the page with -- | 03:02:57 |
| 17 | A. Yes. | 03:02:59 |
| 18 | Q. -- page 80 at the bottom? It says | 03:02:59 |
| 19 | Facebook Platform Changelog at the top. Do you see | 03:03:02 |
| 20 | that? | 03:03:04 |
| 21 | A. I do see that, yes. | 03:03:05 |
| 22 | Q. And then if you turn -- well, what is a | 03:03:07 |
| 23 | changelog, in your understanding? | 03:03:13 |
| 24 | MS. MEHTA: Objection; purports to seek | 03:03:15 |

1 expert testimony from a lay witness, lacks 03:03:17
2 foundation. It's also irrelevant. 03:03:19

3 A. So I look to the changelog because that's 03:03:21
4 where, as I understand it, applications, especially 03:03:24
5 Facebook, introduce new changes to the API. As I 03:03:28
6 have -- I had at that point been an app developer, I 03:03:33
7 would see in those changelog whether there was 03:03:41
8 anything of consequence to my applications. And so 03:03:43
9 for me, the changelog is a list of all those 03:03:47
10 changes. They're often very tedious. 03:03:49

11 Q. Did you review the changelog that appears 03:03:52
12 as part of Hogan Exhibit 5? 03:03:55

13 A. Yes. Well, I certainly recall reviewing 03:03:58
14 the changelog in version 2.0 on -- for example, they 03:04:03
15 do a lot of changes every time -- every time they 03:04:08
16 make any sort of new changes to Facebook. I do 03:04:14
17 unambiguously remembering reviewing this right here. 03:04:20

18 Q. Which page are you looking at? 03:04:26

19 A. I'm looking at page -- it says 91 at the 03:04:29
20 bottom of it. 03:04:31

21 Q. And -- all right -- what is it that causes 03:04:34
22 you to remember unambiguously that you reviewed this 03:04:36
23 one? 03:04:40

24 A. Unambiguously, I remember the -- under 03:04:41

| | | |
|----|--|----------|
| 1 | Facebook Login at the center of the page, the second | 03:04:45 |
| 2 | and third bullets. "Friend list is no longer part | 03:04:49 |
| 3 | of the default permission set and has its own | 03:04:53 |
| 4 | permission." That's what I was describing earlier. | 03:04:56 |
| 5 | I also remember -- and this is the crucial one for | 03:04:59 |
| 6 | me -- "Friend list now only returns friends who also | 03:05:01 |
| 7 | use the app." Both of those are of material | 03:05:05 |
| 8 | consequence to my applications. | 03:05:09 |
| 9 | MS. MEHTA: Objection. | 03:05:15 |
| 10 | Q. In what regard? | 03:05:15 |
| 11 | MS. MEHTA: Objection; move to strike the | 03:05:15 |
| 12 | prior response as nonresponsive. Object to the | 03:05:15 |
| 13 | current question as seeking irrelevant information. | 03:05:19 |
| 14 | A. These two bullet points right here meant | 03:05:24 |
| 15 | that my applications, NameGenWeb and College | 03:05:28 |
| 16 | Connect, could no longer access a list of friends | 03:05:32 |
| 17 | and so therefore they could no longer represent | 03:05:37 |
| 18 | those friends to the user. They just couldn't work. | 03:05:42 |
| 19 | Q. If you move on to page -- with the number | 03:05:45 |
| 20 | 93 at the bottom, there's a section entitled | 03:05:52 |
| 21 | Permissions. Do you see that? | 03:05:56 |
| 22 | A. Yes, I see that. | 03:06:00 |
| 23 | Q. And then at the very bottom, new | 03:06:02 |
| 24 | permissions in version 2.0. Do you see that? | 03:06:03 |

| | | | |
|----|------------|---|----------|
| 1 | A. | Yes, I do. | 03:06:06 |
| 2 | Q. | And then turn to the next page, page 94, | 03:06:07 |
| 3 | | permissions no longer available in version 2.0. Do | 03:06:08 |
| 4 | | you see that? | 03:06:13 |
| 5 | A. | I do. | 03:06:14 |
| 6 | Q. | Do you recall reviewing the permissions | 03:06:14 |
| 7 | | that were no longer available in version 2.0? | 03:06:17 |
| 8 | A. | I absolutely do. | 03:06:20 |
| 9 | Q. | And did these -- did the removal of these | 03:06:22 |
| 10 | | permissions have any significance to your apps? | 03:06:25 |
| 11 | MS. MEHTA: | Objection; irrelevant. | 03:06:30 |
| 12 | A. | So as I talked about earlier, College | 03:06:31 |
| 13 | | Connect highlights which schools an individual user | 03:06:34 |
| 14 | | on Facebook had gone to. So if you have a series of | 03:06:37 |
| 15 | | friends on Facebook, you could see which -- see | 03:06:42 |
| 16 | | which schools they went to. That would be, here, | 03:06:44 |
| 17 | | the permission friends_education_history. The | 03:06:49 |
| 18 | | friends_education_history permission that has been | 03:06:57 |
| 19 | | removed was one that I had used in my applications. | 03:07:00 |
| 20 | Q. | And so the removal of that permission is | 03:07:04 |
| 21 | | one of the things that caused your app not to | 03:07:07 |
| 22 | | function? | 03:07:09 |
| 23 | MS. MEHTA: | Objection; relevance. | 03:07:09 |
| 24 | A. | Along with the list of friends, yes. | 03:07:10 |

1 Q. Did you ever contact anyone at Facebook 03:07:18
2 after you learned about these changes in version 03:07:22
3 2.0? 03:07:26

4 MS. MEHTA: Objection; relevance. 03:07:27

5 A. I did in fact contact people at Facebook. 03:07:30

6 Q. Who did you contact? 03:07:33

7 A. Well, I should say, when I later came in 03:07:36
8 contact with people at Facebook -- as I had stated 03:07:39
9 earlier, I'm -- I was program chair of a conference, 03:07:43
10 International Conference on Web and Social Media. 03:07:51
11 It's a big conference and this conference includes 03:07:55
12 researchers from Facebook and Twitter and Google and 03:07:58
13 Microsoft in addition to academics. 03:08:02

14 Q. Does that conference take place every year 03:08:05
15 or is it -- was it a one-off? 03:08:07

16 A. That is an annual conference. 03:08:09

17 MS. MEHTA: Objection, irrelevant. 03:08:10

18 Q. And when did you become the program chair? 03:08:10

19 MS. MEHTA: Irrelevant. 03:08:10

20 A. I was the program chair for two years 03:08:12
21 in -- for the 2013 and 2014 conferences. That 03:08:15
22 allowed me to attend the conference for free and 03:08:22
23 then get a light to go to the conference. 03:08:25

24 So when I was at the conference, where 03:08:30

| | | |
|----|--|----------|
| 1 | there were researchers from Facebook who I had | 03:08:32 |
| 2 | befriended just as colleagues, I spoke with them | 03:08:35 |
| 3 | about this. In fact, one of them, a lady named Dr. | 03:08:40 |
| 4 | Lada Adamic -- L-A-D-A, A-D-A-M-I-C -- Dr. Adamic | 03:08:43 |
| 5 | was -- we just bumped into each other at the | 03:08:53 |
| 6 | airport. And so immediately, I just turned to her | 03:08:57 |
| 7 | and go like, what happened? And she said, I'm so | 03:09:02 |
| 8 | sorry. And we didn't even identify the topic of the | 03:09:05 |
| 9 | conversation at this point because she knew that I | 03:09:11 |
| 10 | was referring to these specific changes because it | 03:09:14 |
| 11 | was well understood that these changes would inhibit | 03:09:17 |
| 12 | my applications from working. | 03:09:20 |
| 13 | Q. Did she work -- | 03:09:23 |
| 14 | MS. MEHTA: Move to -- hold on -- move to | 03:09:23 |
| 15 | strike, nonresponsive. | 03:09:23 |
| 16 | Q. Did she -- did Dr. Adamic work for | 03:09:26 |
| 17 | Facebook at that time? | 03:09:29 |
| 18 | A. At that time -- | 03:09:29 |
| 19 | MS. MEHTA: Objection -- objection; | 03:09:31 |
| 20 | foundation, relevance. | 03:09:31 |
| 21 | Q. Do you know whether she worked for | 03:09:34 |
| 22 | Facebook at that time? | 03:09:35 |
| 23 | MS. MEHTA: Same objections. | 03:09:37 |
| 24 | A. At that time -- so I had known Lada for | 03:09:38 |

| | | |
|----|--|----------|
| 1 | some years. At that time, she worked for Facebook. | 03:09:42 |
| 2 | Prior to that, she was a professor at the University | 03:09:45 |
| 3 | of Michigan where she had used my app, NameGenWeb, | 03:09:49 |
| 4 | to teach students social networks, just like how I | 03:09:52 |
| 5 | said teachers around the world used my application | 03:09:56 |
| 6 | to show social networks. She was one of them. | 03:09:59 |
| 7 | Q. Can you put a date, approximate date, on | 03:10:02 |
| 8 | this conference and this meeting at the airport with | 03:10:05 |
| 9 | Dr. Adamic? | 03:10:09 |
| 10 | MS. MEHTA: Same objections. | 03:10:09 |
| 11 | A. It was in May. | 03:10:10 |
| 12 | Q. Of which year? | 03:10:11 |
| 13 | A. Of -- well, 2014. This was May or June. | 03:10:13 |
| 14 | I know it was very hot. It was at University of | 03:10:16 |
| 15 | Michigan. That information is available. But it | 03:10:19 |
| 16 | was -- it wasn't very long after the API changes. | 03:10:21 |
| 17 | It was the conference immediately following that. | 03:10:24 |
| 18 | Q. Okay. And can you remember anything else | 03:10:27 |
| 19 | about your conversation with her at the airport? | 03:10:35 |
| 20 | MS. MEHTA: Objection; relevance. | 03:10:37 |
| 21 | A. Not much really. I do remember us talking | 03:10:38 |
| 22 | about it. One of the things that she said to me | 03:10:42 |
| 23 | that had been said by a number of other academics | 03:10:45 |
| 24 | was that I -- she said, well, you can still access | 03:10:48 |

1 these friendship relations if you come to Menlo and 03:10:51
2 work with us. And I replied to her that I don't -- 03:10:54
3 I don't want to just, you know, go to Facebook and 03:10:58
4 look at data at Facebook. I want to be able to show 03:10:59
5 a user their own data and so -- and then see how 03:11:02
6 that works. And so I don't think it's very fair if 03:11:05
7 I can do that inside Facebook but a regular Facebook 03:11:09
8 user cannot do that. So, I mean, I thanked her for 03:11:11
9 the offer. I thought it was very gracious. But I 03:11:16
10 was -- you know, I wanted to be able to maintain 03:11:18
11 this ability to be done outside of Facebook because 03:11:20
12 I considered this academic research and not research 03:11:24
13 for Facebook. 03:11:30
14 Q. And did you ever speak with her again on 03:11:32
15 the topic of these changes? 03:11:34
16 MS. MEHTA: Irrelevant. 03:11:37
17 A. So Dr. Adamic contacted me, I guess out of 03:11:39
18 the blue, months later. And I was actually, I 03:11:47
19 believe, hosting my relatives in Oxford at the time 03:11:52
20 and I was out somewhere. This email comes in and 03:11:57
21 she says, I'll be reviewing the API changes at -- 03:11:59
22 with Product and, you know, whether there might be 03:12:04
23 special permissions for educational use or 03:12:10
24 something. So I'd like you to tell me what you use 03:12:14

| | | |
|----|---|----------|
| 1 | MS. MEHTA: Same objections. | 03:23:41 |
| 2 | A. That is correct. | 03:23:47 |
| 3 | Q. And then at the bottom of page 12, you | 03:23:47 |
| 4 | refer to the Open Graph API 2.0. Do you see that? | 03:23:51 |
| 5 | A. I do see that. | 03:23:54 |
| 6 | Q. And you say, "This change would prove to | 03:23:56 |
| 7 | be most consequential while not necessarily being | 03:23:58 |
| 8 | the most privacy sensitive." | 03:24:02 |
| 9 | A. Yes. | 03:24:05 |
| 10 | Q. What did you mean by that? | 03:24:05 |
| 11 | MS. MEHTA: Objection; purports to call | 03:24:07 |
| 12 | for expert testimony from a lay witness, vague, | 03:24:07 |
| 13 | foundation, and irrelevant. | 03:24:10 |
| 14 | A. So one of the reasons that were given, in | 03:24:14 |
| 15 | my understanding, for the removal of the friendship | 03:24:21 |
| 16 | permissions was that this -- that the friendship | 03:24:26 |
| 17 | permissions were too generous. Too many people had | 03:24:28 |
| 18 | access to the Facebook graph because it was part of | 03:24:32 |
| 19 | the basic permissions. That means any application | 03:24:35 |
| 20 | developer could have this. So that is probably too | 03:24:38 |
| 21 | generous. That's likely too generous. And so I | 03:24:43 |
| 22 | agree with Facebook in making it its own special | 03:24:47 |
| 23 | permission that you have to request and not just | 03:24:50 |
| 24 | giving it away for free. | 03:24:53 |

| | | |
|----|--|----------|
| 1 | However, instead of making it its own | 03:24:56 |
| 2 | permission and just -- instead of making its own | 03:24:58 |
| 3 | permission and still having the same data available, | 03:25:05 |
| 4 | they made it its own permission and really | 03:25:09 |
| 5 | drastically restricted the scope of what data was | 03:25:13 |
| 6 | available. So they would say that that's for | 03:25:16 |
| 7 | privacy reasons. But as is evident, other | 03:25:18 |
| 8 | applications still appear to be able to access this | 03:25:23 |
| 9 | data, even though it's not supposed to be available. | 03:25:28 |
| 10 | Q. What applications are you referring to? | 03:25:31 |
| 11 | A. I know for a -- | 03:25:34 |
| 12 | MS. MEHTA: Hold on. Objection; | 03:25:34 |
| 13 | irrelevant, purports to call for expert opinion from | 03:25:35 |
| 14 | a lay witness, foundation, speculation. | 03:25:37 |
| 15 | THE WITNESS: I knew that was coming for | 03:25:42 |
| 16 | that one. | 03:25:44 |
| 17 | A. So I was single for awhile and I had used | 03:25:51 |
| 18 | Tinder, which is an online dating application. It | 03:25:55 |
| 19 | shows you people that are also on Tinder in your | 03:26:00 |
| 20 | local area. Now, Tinder used Facebook as a login. | 03:26:05 |
| 21 | And so you could download your photos from Facebook | 03:26:08 |
| 22 | to Tinder and so that they would be available on | 03:26:11 |
| 23 | Tinder. And after the API change, it also showed | 03:26:14 |
| 24 | you -- you know, so these people that you would see | 03:26:18 |

1 and then say this could be a prospective date. And 03:26:21
2 then you could do things like swipe left to say no, 03:26:25
3 I'm not interested or swipe right to say yes, I am 03:26:28
4 interested. 03:26:30

5 In order to make these people feel less 03:26:32
6 like strangers, there's lots of other information 03:26:36
7 there, and this information primarily comes from 03:26:38
8 Facebook. This includes whether Tinder -- this 03:26:41
9 Tinder user, who is a stranger, has friends in 03:26:46
10 common with you. So even though they have inhibited 03:26:50
11 me from showing a user their own friends, Facebook 03:26:56
12 still allow Tinder to show a complete stranger the 03:27:00
13 friends that we have in common. 03:27:06

14 MS. MEHTA: Move to strike, nonresponsive. 03:27:08

15 A. That is what I meant by saying it would be 03:27:10
16 very consequential while not necessarily being the 03:27:13
17 most privacy sensitive. 03:27:17

18 Q. Okay, thank you. Did you or have you read 03:27:20
19 any articles in the public press about Facebook 03:27:26
20 entering into some sort of a private agreement with 03:27:31
21 Tinder to make this available? 03:27:35

22 MS. MEHTA: Objection; irrelevant, 03:27:38
23 foundation, speculation. 03:27:38

24 A. I was curious as to how they had access 03:27:42

1 to -- how Facebook had -- how Tinder, sorry -- had 03:27:45
2 access to the Facebook social graph. And I was 03:27:48
3 forwarded a story that actually featured College 03:27:53
4 Connect in it. It featured my colleague, Nicole 03:27:57
5 Ellison, not myself. I was never interviewed for 03:28:00
6 that specific article. In that article, it is 03:28:05
7 quoted as saying that Tinder have had some sort of 03:28:08
8 access to Facebook. That's the only time I can 03:28:14
9 recall seeing that in print. I was surprised to see 03:28:17
10 it in print, in fact. 03:28:22

11 MR. GODKIN: Let me ask the reporter to 03:28:24
12 mark as the next exhibit this document. So this 03:28:25
13 would be ... 03:28:27

14 THE COURT REPORTER: Eight. 03:28:27

15 MR. GODKIN: Eight. 03:28:27

16 (Exhibit 8 was marked for identification 03:28:42
17 and was attached to the transcript.) 03:28:45

18 BY MR. GODKIN 03:28:45

19 Q. I've placed in front of you what we've 03:28:45
20 marked as Hogan Exhibit 8, Dr. Hogan. 03:28:45

21 A. Yes. 03:28:48

22 Q. Can you identify Exhibit 8? 03:28:49

23 A. This is the Wall Street Journal article by 03:28:51
24 Deepa Seetharaman and Elizabeth Dwoskin that I had 03:28:54

1 mentioned previously which was a document that -- 03:29:00
2 was a newspaper story describing the changes that 03:29:03
3 took place with Graph API 2.0. 03:29:09

4 Q. And this is the article that you just 03:29:13
5 testified about a few moments ago? 03:29:16

6 A. Yes, this is the article I testified a few 03:29:18
7 minutes ago that mentioned, you know, API changes 03:29:21
8 and who can still access this data. 03:29:25

9 Q. And if you turn to the third page, there's 03:29:29
10 an article in the middle -- in the middle of the 03:29:33
11 page referencing the popular dating app Tinder. Is 03:29:35
12 that what you were referring to -- 03:29:40

13 MS. MEHTA: Oh -- sorry, go ahead. 03:29:41

14 Q. -- that gave you the information that you 03:29:41
15 testified about Tinder and Facebook? 03:29:44

16 MS. MEHTA: Objection; foundation, 03:29:47
17 speculation, irrelevant. 03:29:48

18 A. Yes, this is the article in question and 03:29:51
19 that is the paragraph in question. 03:29:54

20 Q. And the next paragraph, which begins 03:29:56
21 "Facebook changes doomed College Connect, an app 03:29:59
22 aimed at helping prospective first-generation 03:30:02
23 college students find friends who attend schools or 03:30:07
24 hold jobs they are considering," correct? 03:30:11

| | | | |
|----|----|---|----------|
| 1 | A. | That is correct. | 03:30:14 |
| 2 | Q. | And that's your app, College Connect? | 03:30:14 |
| 3 | A. | That is my app. | 03:30:18 |
| 4 | Q. | And the next sentence references Nicole | 03:30:19 |
| 5 | | Ellison, a University of Michigan professor, and | 03:30:22 |
| 6 | | she's your colleague that worked with you on the | 03:30:25 |
| 7 | | College Connect app? | 03:30:28 |
| 8 | A. | That is the very same Nicole Ellison. | 03:30:28 |
| 9 | Q. | Okay. Were you interviewed by the Wall | 03:30:35 |
| 10 | | Street Journal for this article? | 03:30:39 |
| 11 | A. | I was not -- | 03:30:40 |
| 12 | | MS. MEHTA: Asked and answered. | 03:30:40 |
| 13 | A. | I was not interviewed by the Wall Street | 03:30:42 |
| 14 | | Journal for this article. | 03:30:42 |
| 15 | Q. | Did Facebook offer College Connect the | 03:30:46 |
| 16 | | same access to data as it apparently is giving | 03:30:50 |
| 17 | | Tinder? | 03:30:54 |
| 18 | | MS. MEHTA: Objection; assuming facts not | 03:30:54 |
| 19 | | in evidence, foundation, speculation, irrelevant. | 03:30:56 |
| 20 | A. | To the best of my knowledge, we have not | 03:31:01 |
| 21 | | been approached by Facebook to be given the same | 03:31:04 |
| 22 | | level of access to data that Tinder has. The | 03:31:08 |
| 23 | | closest to that would have been the previously | 03:31:13 |
| 24 | | mentioned conversation with Dr. Adamic about an | 03:31:16 |

1 educational API. 03:31:19

2 Q. Did the introduction of the changes 03:31:21

3 reflected in Graph API Version 2.0 have an effect on 03:31:24

4 your research? 03:31:30

5 MS. MEHTA: Objection; irrelevant. 03:31:32

6 A. That -- the changes made the applications 03:31:36

7 that I was developing or had developed cease to 03:31:42

8 function. So I had to change some of my research 03:31:47

9 agenda as a consequence. Up to that point, I 03:31:52

10 thought that I would be continuing on a variety of 03:31:55

11 work on the Facebook API moving forward. In fact, 03:31:59

12 as I said, we changed College Connect. We changed 03:32:04

13 it to be a laboratory study. In that laboratory 03:32:07

14 study, we showed that actually showing the Facebook 03:32:10

15 social graph made a real difference to who people 03:32:13

16 were able to nominate as their -- as good people for 03:32:16

17 advice. 03:32:22

18 So I wanted to continue on this. I have, 03:32:22

19 for example, a colleague at the University of 03:32:27

20 Swansea, Dr. Daniel Archambault, and we had put 03:32:30

21 together a grant to see what are the kinds of 03:32:37

22 visualization layouts that work best for showing 03:32:40

23 someone their social network. That research cannot 03:32:45

24 continue because we cannot see Facebook social 03:32:51

1 Q. And can I also take it that you can't 04:24:25
2 comment on the extent to which at all they did an 04:24:28
3 analysis of the Terms of Service either prior to 04:24:31
4 becoming developers or after becoming a developer? 04:24:34

5 A. Yeah, no, I don't -- no, I don't know of 04:24:39
6 any analysis they did. 04:24:41

7 Q. Okay. Let's look at Exhibit Number 8. 04:24:53
8 This is the Wall Street Journal article that came up 04:24:57
9 in your discussions with counsel for Six4Three and 04:25:10
10 that you testified about earlier today; is that 04:25:12
11 right? 04:25:14

12 A. Yes, ma'am. 04:25:14

13 Q. Okay. And during your testimony, you 04:25:15
14 referenced your belief that Tinder had some sort of 04:25:16
15 agreement with Facebook after the API change. Do 04:25:22
16 you recall that? 04:25:25

17 A. I do recall that. 04:25:26

18 Q. And you testified that your basis for that 04:25:27
19 is this Wall Street Journal article; is that 04:25:28
20 correct? 04:25:31

21 A. Not entirely. It's also my experience on 04:25:33
22 Tinder and my previous understanding of how the API 04:25:38
23 works and what APIs were available or not available 04:25:42
24 that led me to ponder why it was or how it was that 04:25:44

1 Tinder had access to data. This had confirmed for 04:25:49
2 me that the reason or the nature of that access was 04:25:53
3 because of a deal. 04:25:57

4 Q. Okay. So let's take a step back and break 04:25:58
5 that down. When you talk about your experience on 04:26:01
6 Tinder, you're discussing your experience as a user; 04:26:03
7 is that right? 04:26:06

8 A. That is correct. 04:26:07

9 Q. Okay. You don't have any knowledge as to 04:26:07
10 how the Tinder app works, correct? 04:26:09

11 MR. GODKIN: Objection. 04:26:13

12 A. As an expert in the design of social media 04:26:13
13 systems and someone who also publishes on online 04:26:19
14 dating, I have understanding of how apps work. I 04:26:25
15 don't have any factual details about decisions that 04:26:29
16 Tinder have made or have not made. 04:26:34

17 Q. Right. You've never seen the Tinder 04:26:35
18 source code, right? 04:26:38

19 A. No, ma'am. 04:26:39

20 Q. Is that correct? 04:26:40

21 A. That is correct. I have not seen the 04:26:41
22 Tinder source code. 04:26:41

23 Q. You've never talked to anyone at Tinder 04:26:42
24 about whether they have a deal or don't have a deal 04:26:45

1 with Facebook, correct?

04:26:47

2 A. I have not talked to anyone at Tinder
3 about that.

04:26:49

04:26:51

4 Q. You don't have any personal knowledge of
5 any relationship or deal or agreement between Tinder
6 and Facebook, correct?

04:26:51

04:26:54

04:26:57

7 A. My information about Tinder comes -- of a
8 deal between them comes solely from this paragraph.

04:26:59

04:27:02

9 Q. Okay. So all of the information that you
10 have about what you believe to be a deal between
11 Tinder and Facebook comes from the one paragraph of
12 the Wall Street Journal article. You don't have any
13 personal knowledge, correct?

04:27:06

04:27:08

04:27:11

04:27:15

04:27:17

14 A. It's not fair to say that entirely
15 because, again, the mere fact that they can expose
16 friends suggests that they had access to this data.
17 I know that because I have been on the app and have
18 observed that.

04:27:19

04:27:20

04:27:25

04:27:30

04:27:33

19 Q. When was the last time you were on the
20 app?

04:27:35

04:27:37

21 A. Oh, about a year ago.

04:27:37

22 Q. Okay. So my question is -- so in 2016
23 sometime?

04:27:39

04:27:41

24 A. Yes, ma'am.

04:27:41

1 Q. Okay. So my question is not what you 04:27:42
2 observed as a user of Tinder. I understand that you 04:27:45
3 are a user of Tinder -- 04:27:47

4 A. Yeah, I was. 04:27:49

5 Q. -- that's -- or were a user of Tinder. 04:27:49
6 Set that aside for a moment. My question is: Other 04:27:51
7 than what you can see as a user for Tinder and the 04:27:55
8 Wall Street Journal application, you don't have any 04:27:58
9 personal knowledge of anything -- any agreement 04:28:01
10 between Tinder and Facebook; correct? 04:28:04

11 MR. GODKIN: Objection. 04:28:07

12 A. No, I don't have any knowledge of an 04:28:07
13 agreement. All I have is the understanding that 04:28:10
14 there must be some sort of agreement. Otherwise, 04:28:14
15 Tinder would not have that data. 04:28:17

16 Q. You're assuming that they must have an 04:28:21
17 agreement. Otherwise, you wouldn't see what you're 04:28:23
18 seeing on the app. 04:28:25

19 A. I believe that that's a fair assumption. 04:28:26
20 There is no evidence to suggest that Tinder have 04:28:30
21 hacked Facebook because Tinder have used Facebook 04:28:34
22 and have been featured, you know, in Facebook 04:28:39
23 conferences and Facebook materials and vice versa. 04:28:43
24 So insofar as I have been able to observe that 04:28:47

| | | |
|----|--|----------|
| 1 | Tinder and Facebook seem to get along and that | 04:28:52 |
| 2 | Tinder uses data from Facebook, that there must be | 04:28:55 |
| 3 | some sort of agreement. I am not privy to the | 04:29:00 |
| 4 | nature of that agreement. | 04:29:04 |
| 5 | Q. Okay. Let's focus in on the question, | 04:29:05 |
| 6 | okay? Yes or no; do you have any personal knowledge | 04:29:07 |
| 7 | of any agreement between Tinder and Facebook? | 04:29:10 |
| 8 | A. No. | 04:29:14 |
| 9 | Q. Yes or no; do you have any personal | 04:29:18 |
| 10 | knowledge as to what specific permissions Tinder has | 04:29:20 |
| 11 | or doesn't have from Facebook? | 04:29:26 |
| 12 | A. No. | 04:29:29 |
| 13 | Q. There was a question from Mr. Godkin as to | 04:29:36 |
| 14 | whether or not your app has some sort of agreement | 04:29:39 |
| 15 | with Facebook. Do you recall that? | 04:29:44 |
| 16 | A. Yes, I recall that. | 04:29:46 |
| 17 | Q. And you testified that you have not been | 04:29:48 |
| 18 | approached by Facebook with respect to a special | 04:29:49 |
| 19 | agreement of any kind; is that right? | 04:29:54 |
| 20 | A. Well, I mean, previously -- you know, I | 04:29:56 |
| 21 | mean, Exhibit 6 would suggest that I have been | 04:29:59 |
| 22 | approached about a potential special agreement | 04:30:02 |
| 23 | referred to as the -- some sort of academic API | 04:30:06 |
| 24 | program. But beyond that, I have not been | 04:30:10 |

1 developer to Facebook, did you believe that you were 05:12:24
2 going to have full access to all of Facebook's user 05:12:27
3 data forever? 05:12:32

4 A. No, I didn't even believe I'd have access 05:12:34
5 to most of Facebook's user data. At first, I didn't 05:12:35
6 know what data I would have access to and that 05:12:41
7 through -- and this is actually relevant to this -- 05:12:44
8 through prototyping and toying around with apps and 05:12:47
9 learning about hidden things like rate limiting, I 05:12:52
10 became more clear about what data was available. 05:12:54
11 But I -- no, I mean, Facebook's data use policies 05:12:57
12 change all the time. Their API's change all the 05:13:01
13 time. So it would totally be fair for me to assume 05:13:03
14 that I did not assume -- it would be totally fair 05:13:06
15 for me to say I did not assume that I would have 05:13:07
16 access to all user data for all time. 05:13:13

17 Q. Okay. And when you first signed up to be 05:13:16
18 a developer for Facebook, did you believe that you 05:13:19
19 would have -- strike that. 05:13:21

20 When you first signed up to be a developer 05:13:22
21 for Facebook, did you believe that whatever set of 05:13:25
22 access or permissions you had at that time, you were 05:13:28
23 going to have forever? Or did you understand that 05:13:30
24 the API was going to change and that the platform 05:13:37

1 would change and that Facebook is going to evolve as 05:13:40

2 a company -- 05:13:42

3 MR. GODKIN: Objection. 05:13:43

4 Q. -- and that your ability to access data 05:13:44

5 might evolve as Facebook does? 05:13:45

6 MR. GODKIN: Objection. 05:13:46

7 A. Well, I don't really like the word 05:13:47

8 "evolve" here. Devolve may be a more accurate word. 05:13:48

9 But I do understand that that would change. 05:13:52

10 Facebook themselves change what's available in the 05:13:53

11 API. 05:13:56

12 However, it's important to distinguish 05:13:57

13 that I think there's some kind of data that's maybe 05:13:58

14 incidental. Facebook, for example, made phone 05:14:03

15 numbers available for one point and then at one 05:14:07

16 point, they didn't. That's different from core 05:14:08

17 functionality. Facebook is a social network site. 05:14:11

18 The movie based on Facebook is called the Social 05:14:15

19 Network. It calls itself a social network. So I 05:14:16

20 had pretty strong understandings that social network 05:14:21

21 data would be consistently available for a long 05:14:26

22 period of time, and I certainly acted under the 05:14:30

23 expectations that such core functionality -- so core 05:14:34

24 that it's in the basic permissions -- would still be 05:14:36

1 available for a long time.

05:14:40

2 Q. Okay. So are you -- so your testimony
3 is -- what you're telling the jury is that when you
4 signed up as a developer for Facebook, you believed
5 that you would have access to the same set of
6 permissions and data in perpetuity.

05:14:42

05:14:43

05:14:47

05:14:49

05:14:52

7 MR. GODKIN: Objection.

05:14:55

8 Q. Yes or no.

05:14:56

9 A. No, I don't think that -- no, I don't
10 think that that's a fair statement.

05:14:56

05:14:57

11 Q. Okay. So --

05:15:00

12 A. No, I don't think that in perpetuity is a
13 fair characterization.

05:15:02

05:15:05

14 Q. Okay.

05:15:06

15 A. I think a fair characterization is that I
16 would have access to core data for certainly a
17 longer time horizon than I was given.

05:15:07

05:15:09

05:15:14

18 Q. Okay. Let me ask the question this way.

05:15:17

19 Yes or no; when you signed up as a developer, did
20 you believe that you were going to have access to
21 the same set of data and permissions in perpetuity?

05:15:18

05:15:21

05:15:23

22 Yes or no.

05:15:25

23 A. No.

05:15:27

24 Q. When you signed as a developer, did you

05:15:31

1 BY MS. MILLER:

2 Q. Well, let me ask you this way: Did you
3 learn anything new from reading the complaint that you
4 did not know before?

5 A. I mean, substantively, with respect to
6 this case, I learned about this case.

7 With respect to the facts and whether they were
8 expressed accurately in that document or not, there
9 was -- I learned that there was some expression of
10 concern about when the decision was made internally to
11 change the API in some way and that -- that there was
12 some sort of discrepancy.

13 I used, since then, a link that was in that
14 document suggesting that a large number of the top
15 iPhone apps in, I guess, 2011 or 2012 -- I can't
16 recall, but it would be the single URL in there. It
17 was an infographic suggesting that they had used the
18 Facebook API. I went and looked for that infographic
19 to see if I could find the statistics myself, and
20 I could not find the original sources for them.

21 But other than that, I mean, most of what was
22 in there was public knowledge; a lot of discussions of
23 claims that were advanced by Mark Zuckerberg. Some of
24 this I had been aware of beforehand, and most of it,
25 I would say, I was aware of beforehand.

EXHIBIT 7

| Page 1 | Page 2 |
|--|---|
| <p>1 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA</p> <p>2 IN AND FOR THE COUNTY OF SAN MATEO</p> <p>3</p> <p>4 SIX4THREE, LLC, a Delaware)</p> <p>5 limited liability company,)</p> <p>6)</p> <p>7 Plaintiff,)</p> <p>8)</p> <p>9 vs.) No. CIV533328</p> <p>10)</p> <p>11)</p> <p>12 FACEBOOK, INC., a Delaware)</p> <p>13 corporation, and DOES 1-50,)</p> <p>14 inclusive,)</p> <p>15)</p> <p>16 Defendants.)</p> <p>17)</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22 VIDEOTAPED HIGHLY CONFIDENTIAL DEPOSITION OF</p> <p>23 TED KRAMER</p> <p>24 San Francisco, California</p> <p>25 January 13, 2017</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> <p>36</p> <p>37</p> <p>38</p> <p>39</p> <p>40</p> <p>41</p> <p>42</p> <p>43</p> <p>44</p> <p>45</p> <p>46</p> <p>47</p> <p>48</p> <p>49</p> <p>50</p> <p>51</p> <p>52</p> <p>53</p> <p>54</p> <p>55</p> <p>56</p> <p>57</p> <p>58</p> <p>59</p> <p>60</p> <p>61</p> <p>62</p> <p>63</p> <p>64</p> <p>65</p> 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<p>979</p> <p>980</p> <p>981</p> <p>982</p> <p>983</p> <p>984</p> <p>985</p> <p>986</p> <p>987</p> <p>988</p> <p>989</p> <p>990</p> <p>991</p> <p>992</p> <p>993</p> <p>994</p> <p>995</p> <p>996</p> <p>997</p> <p>998</p> <p>999</p> <p>1000</p> | <p>1 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA</p> <p>2 IN AND FOR THE COUNTY OF SAN MATEO</p> <p>3</p> <p>4 SIX4THREE, LLC, a Delaware)</p> <p>5 limited liability company,)</p> <p>6)</p> <p>7 Plaintiff,)</p> <p>8)</p> <p>9 vs.) No. CIV533328</p> <p>10)</p> <p>11)</p> <p>12 FACEBOOK, INC., a Delaware)</p> <p>13 corporation and DOES 1-50,)</p> <p>14 inclusive,)</p> <p>15)</p> <p>16 Defendants.)</p> <p>17)</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> <p>36</p> <p>37</p> <p>38</p> <p>39</p> <p>40</p> <p>41</p> <p>42</p> <p>43</p> <p>44</p> <p>45</p> <p>46</p> <p>47</p> <p>48</p> <p>49</p> <p>50</p> 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| <p style="text-align: right;">Page 161</p> <p>1 interest in this type of product.</p> <p>2 Q. Going to the second full paragraph, the</p> <p>3 second sentence reads, "If the app had continued to</p> <p>4 grow at its then current rate, a very modest</p> <p>5 assumption is apps tend to grow more quickly once</p> <p>6 network effects are taken into account, Six4Three</p> <p>7 very soon would have been able to provide unique</p> <p>8 photo contextual intelligence and very large revenue</p> <p>9 streams from organizing, sorting, and mining the</p> <p>10 photos on Facebook."</p> <p>11 The phrase "then current rate," what --</p> <p>12 what does the then current date --</p> <p>13 MR. GODKIN: Rate.</p> <p>14 BY MS. MILLER:</p> <p>15 Q. -- referred to?</p> <p>16 A. To clarify, do you mean rate or date? You</p> <p>17 said --</p> <p>18 Q. Date. What is the date of the then current</p> <p>19 rate referenced in that sentence?</p> <p>20 A. Q3 and Q4 of 2014.</p> <p>21 Q. Six months?</p> <p>22 A. Yes.</p> <p>23 Q. So that would be July through December of</p> <p>24 2014?</p> <p>25 A. I would include up until -- so I will</p> | <p style="text-align: right;">Page 162</p> <p>1 change my statement. I -- I would include up until</p> <p>2 the app ceased to function, so I will say April of</p> <p>3 2015 as well. So we would then go three quarters,</p> <p>4 Q3, Q4, and Q1.</p> <p>5 Q. So if the app had continued to grow at its</p> <p>6 rate over the months of July 2014 through April</p> <p>7 2015, Six4 -- Six4Three would very soon have been</p> <p>8 able to provide unique photo contextual intelligence</p> <p>9 and very large revenue streams from organizing,</p> <p>10 sorting, and mining the photos on Facebook?</p> <p>11 A. Yes.</p> <p>12 Q. Turn to page 27, please.</p> <p>13 And then looking at the third full</p> <p>14 paragraph under subsection B, the first sentence</p> <p>15 reads, "Facebook did not notify Six4Three of the</p> <p>16 shutting down of Graph API and the deprecating of</p> <p>17 the friends photos endpoint until January 20th,</p> <p>18 2015."</p> <p>19 Is that an accurate statement?</p> <p>20 A. Yes.</p> <p>21 Q. And then on the next page in the second</p> <p>22 paragraph, four sentences in, you write, "Facebook</p> <p>23 provided Six4Three with notice of many different</p> <p>24 changes and yet not until January 20th, 2015, did</p> <p>25 Facebook send notice to Six4Three of a change that</p> |
| <p style="text-align: right;">Page 163</p> <p>1 would cause Six4Three's app to shut down."</p> <p>2 Is that an accurate statement?</p> <p>3 A. Sorry. I apologize. Did you say we're on</p> <p>4 the next page?</p> <p>5 Q. Yes, sorry. Page 28, first full paragraph,</p> <p>6 which starts about halfway down the page, and I'm</p> <p>7 looking at the fourth sentence.</p> <p>8 A. Can you repeat your question?</p> <p>9 Q. Yeah. The -- the statement that "Facebook</p> <p>10 provided Six4Three with notice of many different</p> <p>11 changes and yet not until January 20th, 2015, did</p> <p>12 Facebook send notice to Six4Three of a change that</p> <p>13 would cause Six4Three's app to shut down."</p> <p>14 My question was: Is that an accurate</p> <p>15 statement?</p> <p>16 A. Yes.</p> <p>17 Q. And I won't go through all of them, but</p> <p>18 this is included in several of the interrogatory</p> <p>19 responses.</p> <p>20 So your testimony is that Six4Three was not</p> <p>21 notified of the transition from Graph API Version 1</p> <p>22 to Graph API Version 2 until January 20th, 2015?</p> <p>23 MR. GODKIN: Objection.</p> <p>24 THE WITNESS: No, I did not say that.</p> <p>25 BY MS. MILLER:</p> | <p style="text-align: right;">Page 164</p> <p>1 Q. What is inaccurate about what I just read?</p> <p>2 A. The implications of what that change meant</p> <p>3 were not communicated to us until January 20th,</p> <p>4 2015.</p> <p>5 Q. When did you first become aware that -- or</p> <p>6 Six4Three would have to transition from Graph API</p> <p>7 Version 1 to Graph API Version 2?</p> <p>8 A. I don't remember. It was in 2014.</p> <p>9 Q. Was it in May of 2014?</p> <p>10 A. I don't remember.</p> <p>11 Q. You recall having a conversation with</p> <p>12 Mr. Gildea in May of 2014 regarding the</p> <p>13 transition from Graph API Version 1 to Graph API --</p> <p>14 THE COURT REPORTER: I'm sorry. Can you</p> <p>15 say that again?</p> <p>16 MS. MILLER: Sorry.</p> <p>17 Q. Do you remember -- do you recall a</p> <p>18 conversation with Mr. Gildea in May 2014 regarding</p> <p>19 the transition of Graph API Version 1 to Graph API</p> <p>20 Version 2?</p> <p>21 A. I don't remember.</p> <p>22 Q. Do you recall -- so you -- you have no</p> <p>23 memory of when -- between May 2014 and January of</p> <p>24 2015 when you first learned of the transition to</p> <p>25 Graph API Version 2?</p> |

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| <p style="text-align: right;">Page 181</p> <p>1 point approved the Pikinis app, correct?</p> <p>2 A. Correct.</p> <p>3 Q. When did Six4Three submit the Pikinis app</p> <p>4 for approval?</p> <p>5 A. I don't remember.</p> <p>6 Q. Was it before announce -- before or after</p> <p>7 the announcement that Facebook was transitioning</p> <p>8 from Graph API Version 1 to Graph API Version 2?</p> <p>9 A. I don't remember.</p> <p>10 Q. Do you know what the approval process</p> <p>11 entailed?</p> <p>12 A. No. I left that to Mr. Gildea.</p> <p>13 Q. Mr. Gildea submitted the Six4Three app to</p> <p>14 Facebook for approval?</p> <p>15 A. Correct.</p> <p>16 Q. Please look at Exhibit 47.</p> <p>17 And I want to direct your attention to Form</p> <p>18 Interrogatory Number 8.4.</p> <p>19 MR. GODKIN: You better stop, because 47 is</p> <p>20 just the verification.</p> <p>21 MS. MILLER: Thank you.</p> <p>22 45. My apologies. Exhibit 45.</p> <p>23 Q. And it's Form Interrogatory 8.4. And in</p> <p>24 the first supplemental response on page 7 Six4Three</p> <p>25 says that as of April 30th, 2015, 4,481 users had</p> | <p style="text-align: right;">Page 182</p> <p>1 downloaded the Pikinis app of whom 3,963 had</p> <p>2 subscriptions to premium contents.</p> <p>3 Do you see that?</p> <p>4 A. Sorry. Where are you seeing the date?</p> <p>5 Q. Oh, I was -- it was at the time Facebook</p> <p>6 ended access to the friends photos endpoint, which I</p> <p>7 think we've established is April 30th, 2015.</p> <p>8 A. I apologize. The supplemental response or</p> <p>9 the second supplemental response?</p> <p>10 Q. The supplemental response on page 7.</p> <p>11 MR. GODKIN: Could you read the question</p> <p>12 back? I'm not sure I remember what it was.</p> <p>13 MS. MILLER: Yes.</p> <p>14 Q. In the first supplemental response on</p> <p>15 page 7 Six4Three states that as of April 30th, 2015,</p> <p>16 4,481 users had downloaded the app of whom 3,963 had</p> <p>17 subscriptions to premium content.</p> <p>18 That's a correct statement? And I -- I'm</p> <p>19 not actually trying to -- I'm not trying to trip you</p> <p>20 up with -- I know the numbers have shifted a little</p> <p>21 bit, but I read that accurately?</p> <p>22 A. Yes.</p> <p>23 Q. And then it goes on to say that, "Six4Three</p> <p>24 further notes that with its then existing user base</p> <p>25 at the time Six4Three ceased operations and with</p> |
| <p style="text-align: right;">Page 183</p> <p>1 absolutely no further growth in user base, product</p> <p>2 development, or the additional monetization</p> <p>3 Six4Three had planned, Six4Three would have obtained</p> <p>4 profits amounting to 1.149569 dollars." We'll call</p> <p>5 it \$1.15 million.</p> <p>6 THE COURT REPORTER: I'm sorry. One point?</p> <p>7 MS. MILLER: One-five.</p> <p>8 Q. Do you see that?</p> <p>9 A. Correct.</p> <p>10 Q. How did you derive that number?</p> <p>11 A. In work with my investor, Mr. Scaramellino,</p> <p>12 we put together a financial model based on our</p> <p>13 previous results and existing user growth.</p> <p>14 Q. So here you're saying, though, that this</p> <p>15 number is based on no growth, correct?</p> <p>16 It's -- it's -- my understanding of this,</p> <p>17 and tell me if I'm wrong, is that if Six4Three had</p> <p>18 4,481 users for two years and no more, 3 -- 3,963 of</p> <p>19 whom had subscriptions to premium content, it would</p> <p>20 have profits of \$1.15 million over a two-year</p> <p>21 period?</p> <p>22 A. Correct.</p> <p>23 MR. GODKIN: Object -- go ahead.</p> <p>24 BY MS. MILLER:</p> <p>25 Q. And so once a user had downloaded the app,</p> | <p style="text-align: right;">Page 184</p> <p>1 they didn't generate any additional revenue for</p> <p>2 Six4Three unless they bought premium subscription</p> <p>3 service, right?</p> <p>4 A. Correct.</p> <p>5 Q. And so if we round up the 3,963 to 4,000</p> <p>6 and multiply that by 48 months and \$2 per month for</p> <p>7 premium subscription -- and let's just call -- call</p> <p>8 it 50 months so that we have it -- it's -- it's --</p> <p>9 it's -- the numbers are --</p> <p>10 MR. GODKIN: I take it you weren't a math</p> <p>11 major.</p> <p>12 BY MS. MILLER:</p> <p>13 Q. So the numbers are easier, we'll say 4,000</p> <p>14 users at \$2 per month over 50 months. That's</p> <p>15 \$400,000.</p> <p>16 How do you get to 1.15?</p> <p>17 MR. GODKIN: Objection.</p> <p>18 THE WITNESS: I would have to look at the</p> <p>19 model that we presented.</p> <p>20 BY MS. MILLER:</p> <p>21 Q. You would agree with me, though, that based</p> <p>22 solely on \$2 per month per user over 48 months, you</p> <p>23 cannot get to \$1.15 million?</p> <p>24 MR. GODKIN: Objection.</p> <p>25 THE WITNESS: No, I don't.</p> |

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|---|--|
| <p style="text-align: right;">Page 193</p> <p>1 for Six4Three?</p> <p>2 MR. GODKIN: Objection.</p> <p>3 THE WITNESS: Can you repeat your question?</p> <p>4 BY MS. MILLER:</p> <p>5 Q. Let me rephrase it.</p> <p>6 Sitting here today, you can't point me to a</p> <p>7 single other document other than Exhibits L and M</p> <p>8 that include information as to whether Six4Three had</p> <p>9 any actual sales of the Pikinis app?</p> <p>10 MR. GODKIN: Objection.</p> <p>11 THE WITNESS: To clarify your question,</p> <p>12 you're saying that only these two exhibits are the</p> <p>13 only examples of Pikinis generating revenue?</p> <p>14 BY MS. MILLER:</p> <p>15 Q. That provide data of -- that show Pikinis</p> <p>16 generating revenue, yes.</p> <p>17 A. No.</p> <p>18 Q. I got a little muddled so I just want to be</p> <p>19 clear. Other than these two exhibits, are there any</p> <p>20 other documents that show actual sales of the</p> <p>21 Pikinis app?</p> <p>22 A. There are transaction records between Apple</p> <p>23 depositing money into our bank account that</p> <p>24 demonstrate sales.</p> <p>25 Q. And you would be able to see that from bank</p> | <p style="text-align: right;">Page 194</p> <p>1 statements?</p> <p>2 A. Correct.</p> <p>3 Q. Can I have you look at Exhibit K, please?</p> <p>4 What is Exhibit K?</p> <p>5 A. It appears to be metrics for in-app</p> <p>6 subscriptions as well as the app download.</p> <p>7 Q. Do you know where this came from?</p> <p>8 A. The Apple developer -- iTunes developer</p> <p>9 website.</p> <p>10 THE COURT REPORTER: I'm sorry. Developer?</p> <p>11 THE WITNESS: Website.</p> <p>12 THE COURT REPORTER: Thank you.</p> <p>13 BY MS. MILLER:</p> <p>14 Q. If you look back at rog Number 20 and</p> <p>15 Six4Three's -- third supplemental response. I'm</p> <p>16 looking at page 56, the first full paragraph.</p> <p>17 The first sentence reads, "Six4Three was</p> <p>18 able to identify a screenshot in its files, though</p> <p>19 it cannot accurately identify the specific date of</p> <p>20 the screenshot from its prior access of Apple's</p> <p>21 developer website."</p> <p>22 Did you generate this screenshot?</p> <p>23 A. I don't remember.</p> <p>24 Q. Did you provide this screenshot to counsel</p> <p>25 to produce to us in this case?</p> |
| <p style="text-align: right;">Page 195</p> <p>1 A. I don't remember. It could have come from</p> <p>2 myself or Mr. Gildea.</p> <p>3 Q. Is there anyone else this could have come</p> <p>4 from?</p> <p>5 A. No.</p> <p>6 Q. If you flip to page 80, you'll see these</p> <p>7 responses were served on December 27th, 2016, so</p> <p>8 about three weeks ago. You can't remember three</p> <p>9 weeks ago whether or not you provided this</p> <p>10 screenshot to counsel?</p> <p>11 A. I'm saying I can't remember when this</p> <p>12 screenshot was provided to counsel.</p> <p>13 Q. Did you provide the screenshot to counsel?</p> <p>14 A. As I said, I don't remember.</p> <p>15 Q. Did you take the screenshot?</p> <p>16 A. I don't remember.</p> <p>17 Q. And if Mr. Gildea says that he did not do</p> <p>18 this, does that mean it necessarily was you?</p> <p>19 MR. GODKIN: Objection.</p> <p>20 THE WITNESS: Potentially, yes.</p> <p>21 BY MS. MILLER:</p> <p>22 Q. Is it possible that Mr. Scaramellino took</p> <p>23 this screenshot?</p> <p>24 A. No.</p> <p>25 Q. All right. This screenshot shows 4,320</p> | <p style="text-align: right;">Page 196</p> <p>1 basic app downloads, 140 one-month app</p> <p>2 subscriptions, 14 six-month app subscriptions, and 7</p> <p>3 one-year app subscriptions. This formed the basis</p> <p>4 of Six4Three's original claim of a total of 4,481</p> <p>5 downloads, correct?</p> <p>6 A. Correct.</p> <p>7 Q. And Six4Three believes that this</p> <p>8 information is accurate?</p> <p>9 A. Yes.</p> <p>10 Q. So the 4,320 -- sorry. Strike that.</p> <p>11 Of the 4,320 -- start over.</p> <p>12 Of the 4,481 downloads, only 140 of those</p> <p>13 were one-month subscriptions?</p> <p>14 A. As per the document, yes.</p> <p>15 Q. And you believe that's accurate?</p> <p>16 A. Yes.</p> <p>17 Q. And we were discussing this. Apple doesn't</p> <p>18 allow you to do recurring one-month subscriptions.</p> <p>19 Do you know how many people paid for the second</p> <p>20 month?</p> <p>21 A. I do not.</p> <p>22 Q. Do you have any way of determining that?</p> <p>23 A. I don't believe so.</p> <p>24 Q. And you have no way of determining whether</p> <p>25 or not the basic app download was a paid download,</p> |

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| <p style="text-align: right;">Page 205</p> <p>1 THE WITNESS: I read this as the</p> <p>2 1.15 million is the sum of capital and uncompensated</p> <p>3 labor.</p> <p>4 BY MS. MILLER:</p> <p>5 Q. Expended by Six4Three and its team members?</p> <p>6 A. Correct.</p> <p>7 Q. And you believe that that's accurate?</p> <p>8 A. Yes.</p> <p>9 Q. How was that number calculated?</p> <p>10 A. In work put together by myself and counsel</p> <p>11 to determine the damages caused by the shutdown of</p> <p>12 our app and our business.</p> <p>13 Q. What was the nature of that work?</p> <p>14 A. Providing the amount of capital that we</p> <p>15 invested as well as the amount of time that we</p> <p>16 invested.</p> <p>17 Q. What was the capital that Six4Three</p> <p>18 invested?</p> <p>19 A. As I previously had stated, around</p> <p>20 \$250,000.</p> <p>21 Excuse me. I -- I revise that. \$250,000</p> <p>22 was the investment. I can't remember how much of</p> <p>23 that capital we had spent.</p> <p>24 Q. So less than \$250,000 in capital?</p> <p>25 A. Correct.</p> | <p style="text-align: right;">Page 206</p> <p>1 Q. And so the uncompensated labor expended by</p> <p>2 Six4Three was over \$900,000?</p> <p>3 A. Yes.</p> <p>4 Q. How do you determine that number?</p> <p>5 A. I don't have that information in front of</p> <p>6 me.</p> <p>7 Q. You can't tell me even the method that you</p> <p>8 used to determine that number?</p> <p>9 A. I need the information in front of me.</p> <p>10 Q. What information?</p> <p>11 A. The model that we built to approximate our</p> <p>12 damages.</p> <p>13 Q. Is that different than the business model</p> <p>14 that you worked on with Mr. Scaramellino?</p> <p>15 A. Yes.</p> <p>16 Q. And you can't recall what information went</p> <p>17 into the model to determine over \$900,000 in</p> <p>18 uncompensated labor?</p> <p>19 A. At the moment, no.</p> <p>20 Q. How much uncompensated labor did you</p> <p>21 provide to Six4Three?</p> <p>22 A. Almost two and a half years' worth.</p> <p>23 Q. How much was that worth?</p> <p>24 A. Hundreds of thousands of dollars.</p> <p>25 Q. Did Mr. Scaramellino's work for Six4Three</p> |
| <p style="text-align: right;">Page 207</p> <p>1 go into calculating the -- the 1.15 million in</p> <p>2 capital and uncompensated labor?</p> <p>3 A. I can't remember.</p> <p>4 Q. Did Mr. Belongie's?</p> <p>5 A. I can't remember.</p> <p>6 Q. Did Mr. Mahoney's?</p> <p>7 A. I can't remember.</p> <p>8 Q. And Mr. Gildea and Mr. Reiter were</p> <p>9 compensated for their labor for Six4Three, correct?</p> <p>10 A. Yes.</p> <p>11 Q. So their -- their -- their labor would not</p> <p>12 have gone into that calculation?</p> <p>13 MR. GODKIN: Objection.</p> <p>14 THE WITNESS: I can't remember.</p> <p>15 BY MS. MILLER:</p> <p>16 Q. You have a full-time job right now,</p> <p>17 correct?</p> <p>18 A. Correct.</p> <p>19 Q. What's your yearly salary?</p> <p>20 A. I make \$120,000 a year.</p> <p>21 Q. And so -- how much did you make at WeWork?</p> <p>22 MR. GODKIN: Objection.</p> <p>23 THE WITNESS: Around a hundred thousand</p> <p>24 dollars a year.</p> <p>25 BY MS. MILLER:</p> | <p style="text-align: right;">Page 208</p> <p>1 Q. And you're -- those were full-time jobs?</p> <p>2 A. Correct.</p> <p>3 Q. And you were working ten to twenty hours a</p> <p>4 week for Six4Three?</p> <p>5 A. Correct.</p> <p>6 Q. And you think your -- the value of your</p> <p>7 labor was hundreds of thousands of dollars over two</p> <p>8 and a half years for ten to twenty hours per week?</p> <p>9 A. Correct.</p> <p>10 Q. What is the form of the model that you used</p> <p>11 to come up with this number, the 1.15 million in</p> <p>12 capital and uncompensated labor?</p> <p>13 MR. GODKIN: Objection.</p> <p>14 THE WITNESS: I can't remember.</p> <p>15 BY MS. MILLER:</p> <p>16 Q. Is it in a spreadsheet?</p> <p>17 A. Yes.</p> <p>18 I apologize. I didn't understand what you</p> <p>19 meant by form.</p> <p>20 Q. Fair enough.</p> <p>21 Who prepared that spreadsheet?</p> <p>22 A. Myself and Mr. Scaramellino.</p> <p>23 Q. When did you prepare that spreadsheet?</p> <p>24 A. I don't remember. Prior to us filing this</p> <p>25 complaint.</p> |

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| <p style="text-align: right;">Page 221</p> <p>1 August 2014 is when we were offering free downloads?</p> <p>2 Q. That period of time included offers of free</p> <p>3 downloads, correct?</p> <p>4 A. It included free downloads, but it did not</p> <p>5 -- I can't remember if there were -- if it also</p> <p>6 included paid downloads. I believe it included paid</p> <p>7 downloads too.</p> <p>8 Q. But you're not sure?</p> <p>9 A. I'm not sure on either side of the</p> <p>10 question.</p> <p>11 Q. And you can't determine how many of the</p> <p>12 downloads were paid downloads and how many were free</p> <p>13 downloads, correct?</p> <p>14 A. I'm of the belief no, that we cannot.</p> <p>15 Q. If you move down to the subscription</p> <p>16 revenue assumptions. Do you know where these</p> <p>17 numbers came from?</p> <p>18 Actually -- and I'll point you to the</p> <p>19 assumption notes on the far right-hand side.</p> <p>20 A. I do not.</p> <p>21 Q. It says that this was based on the data</p> <p>22 from the actual subscriptions from July 16th through</p> <p>23 August 31st.</p> <p>24 A. That's three of -- three of four of the</p> <p>25 assumptions.</p> | <p style="text-align: right;">Page 222</p> <p>1 Q. Correct. And the -- the other one is</p> <p>2 August 22nd to September 30th, 2014?</p> <p>3 A. That's correct.</p> <p>4 Q. And you have no way of determining whether</p> <p>5 or not those subscriptions were paid subscriptions,</p> <p>6 correct?</p> <p>7 A. I personally do not.</p> <p>8 Q. And, in fact, the rates, based on the</p> <p>9 information we have from the iTunes data, is quite a</p> <p>10 bit lower than that for paid subscriptions?</p> <p>11 MR. GODKIN: Objection.</p> <p>12 THE WITNESS: They're not comparing the</p> <p>13 same period, though.</p> <p>14 BY MS. MILLER:</p> <p>15 Q. The Apple numbers, as I understand them,</p> <p>16 cover the entire period that Pikinis was available.</p> <p>17 A. Correct, but this assumption does not cover</p> <p>18 the entire period.</p> <p>19 Q. Correct. It's much higher. And this was</p> <p>20 the period when Pikinis was being offered for free,</p> <p>21 including premium services for free.</p> <p>22 A. Correct. It was also a period, though,</p> <p>23 where we were marketing the app.</p> <p>24 Q. Did you market the app after August 31st?</p> <p>25 A. I believe so, yes.</p> |
| <p style="text-align: right;">Page 223</p> <p>1 Q. What's that?</p> <p>2 A. I believe so, yes.</p> <p>3 Q. When did you stop marketing the app?</p> <p>4 A. I don't remember how long our Facebook ad</p> <p>5 campaign lasted.</p> <p>6 Q. Why did you stop marketing the ad?</p> <p>7 A. Based on our understanding, we were unsure</p> <p>8 if our app would continue to function.</p> <p>9 Q. That was in January of 2015?</p> <p>10 A. No. We knew in January of 2015 that our</p> <p>11 app would not function. We knew in August and</p> <p>12 September that we needed to look into if our app</p> <p>13 would function. So we decided not to allocate more</p> <p>14 capital towards marketing something that potentially</p> <p>15 could not exist.</p> <p>16 Q. It took you from August of 2014 until</p> <p>17 January of 2015 to determine that your app could no</p> <p>18 longer exist?</p> <p>19 MR. GODKIN: Objection.</p> <p>20 THE WITNESS: We didn't know until we were</p> <p>21 told directly by Facebook.</p> <p>22 BY MS. MILLER:</p> <p>23 Q. But you knew enough to stop marketing in</p> <p>24 August of 2014?</p> <p>25 MR. GODKIN: Objection.</p> | <p style="text-align: right;">Page 224</p> <p>1 THE WITNESS: We knew we needed to conserve</p> <p>2 our capital for the future of the business.</p> <p>3 BY MS. MILLER:</p> <p>4 Q. What did -- what did Six4Three do between</p> <p>5 August 2014 and January 2015?</p> <p>6 A. We continued to monitor the app's organic</p> <p>7 growth and look into how we were going to be</p> <p>8 affected by the changes.</p> <p>9 Q. I think I previously asked you a question,</p> <p>10 you have no way of determining whether or not the</p> <p>11 paid -- the subscriptions listed in this chart were</p> <p>12 paid subscriptions, correct? And you answered, I</p> <p>13 personally do not.</p> <p>14 Is there anyone at Six4Three who knows who</p> <p>15 those -- who -- whether or not the subscriptions</p> <p>16 were paid subscriptions?</p> <p>17 A. I don't know.</p> <p>18 Q. Who would possibly know that at Six4Three?</p> <p>19 A. Potentially Mr. Gildea.</p> <p>20 Q. Anyone else?</p> <p>21 A. I don't know.</p> <p>22 Q. Would Mr. Scaramellino know?</p> <p>23 A. I don't know.</p> <p>24 Q. I would have to ask him?</p> <p>25 A. Correct.</p> |

EXHIBIT 8

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1 average, you probably exchanged two to three e-mails
 2 with Mr. Kramer a week; is that right?
 3 A. I -- I really don't know, but that seems
 4 right.
 5 Q. How about with Mr. Scaramellino related
 6 to Six4Three and Pikinis?
 7 A. Similar. Maybe one or two e-mails a
 8 week.
 9 Q. Did you stay in fairly consistent contact
 10 with Mr. Scaramellino regarding Six4Three from
 11 December 12th through July 2014?
 12 A. We talked regularly, yeah.
 13 Q. And Mr. Scaramellino is based in Boston;
 14 is that right?
 15 A. He is now based in Boston, that's right.
 16 Q. Did you do anything to prepare for
 17 today's deposition?
 18 A. I met with my counsel.
 19 Q. That's Mr. Kruzer?
 20 A. Yes.
 21 Q. When did you meet with Mr. Kruzer?
 22 A. I met with him on the previous Friday, as
 23 well as yesterday afternoon.
 24 Q. About how long did you meet with
 25 Mr. Kruzer?

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1 A. No, I don't think so.
 2 Q. Did you review any documents in
 3 preparation for this deposition?
 4 A. I reviewed the -- the documents that I
 5 had turned over so that I was familiar with them.
 6 Q. Anything else?
 7 A. No.
 8 Q. Are you being compensated for your time
 9 today?
 10 A. I'm not.
 11 Q. Okay. Going back to the Facebook
 12 Platform, when did you first hear about the Facebook
 13 Platform?
 14 A. I was aware of it for many years prior to
 15 my involvement with Six4Three. I really can't say
 16 when I first became aware of it.
 17 Q. Do you think you would have heard about
 18 it in 2007 when it first launched?
 19 A. It's very likely, yeah.
 20 Q. That was the year that you graduated from
 21 college?
 22 A. That's right.
 23 Q. Do you know what F8 is?
 24 A. Yes.
 25 Q. What is it?

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1 A. I would say it was about an hour to an
 2 hour and a half. The first meeting was maybe a little
 3 -- yeah, about an hour. And our meeting yesterday was
 4 about an hour and a half.
 5 Q. Did you talk to anybody else about --
 6 have you talked to anybody else about this case?
 7 A. There were -- for our first meeting,
 8 there were other individuals present at the meeting.
 9 Q. Who was present?
 10 A. Mr. -- Mr. Kramer, Mr. Scaramellino,
 11 Mr. Godkin, I believe. And I think that was everyone.
 12 Q. And that was the meeting on Friday --
 13 A. That's right.
 14 Q. -- last Friday?
 15 Was that an in-person meeting?
 16 A. It was a telephone meeting.
 17 Q. Before last Friday had you talked to
 18 Mr. Kramer about this case?
 19 A. Yeah, we -- we've discussed the case.
 20 Q. And I don't want you to tell me anything
 21 that you discussed in the presence of attorneys, but
 22 did you ever have conversations about this case
 23 outside the presence of attorneys?
 24 A. I don't believe so.
 25 Q. What about with Mr. Scaramellino?

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1 A. It is the Facebook developer conference.
 2 Q. Have you ever attended F8?
 3 A. No, I haven't.
 4 Q. Have you ever watched any of the online
 5 videos of an F8 presentation?
 6 A. I don't believe so. I may have watched
 7 the -- the video of the -- I think it was the 2014 F8,
 8 the Graph API 2.0 changes. Didn't watch it live and
 9 I'm not sure at what time I might have watched it. So
 10 I can't say that I definitively did or didn't.
 11 Q. I guess what's your best guess in terms
 12 of whether or not you've seen it or not?
 13 MR. KRUZER: Objection.
 14 THE WITNESS: I would guess that I have
 15 -- have not watched it in its entirety. I did read
 16 materials related to the announcements.
 17 Q. BY MS. MILLER: When did you read those
 18 materials?
 19 A. I believe I read them in late May of that
 20 year.
 21 Q. And what materials were those?
 22 A. I recall a -- a blog post that was posted
 23 on the Facebook developer site, and I recall reading
 24 some API documentation.
 25 Q. Stepping back, when did you first hear

| | |
|---|--|
| <p style="text-align: right;">Page 117</p> <p>1 about the Facebook Graph API?</p> <p>2 A. I'm not sure.</p> <p>3 Q. You're not sure?</p> <p>4 Do you recall when you were first aware</p> <p>5 that Facebook had opened up certain data endpoints,</p> <p>6 including the friends data endpoints?</p> <p>7 A. No, I don't know, you know, specifically</p> <p>8 when I became aware of that. I know it was prior to</p> <p>9 my involvement in Six4Three, but I don't have an exact</p> <p>10 date.</p> <p>11 Q. Do you know why you might have become</p> <p>12 aware of Graph API?</p> <p>13 A. It was a pretty common thing in the</p> <p>14 developer community, so it was something that just</p> <p>15 about everyone who was developing applications was</p> <p>16 aware of.</p> <p>17 Q. When you heard about Facebook Graph API,</p> <p>18 did you understand that it would be periodically</p> <p>19 updated?</p> <p>20 A. Yes.</p> <p>21 Q. And as with virtually all software, that</p> <p>22 update would involve a new version number?</p> <p>23 A. Yes.</p> <p>24 Q. When did you first use the Facebook</p> <p>25 Platform SDK?</p> | <p style="text-align: right;">Page 118</p> <p>1 A. I believe the first time I used that --</p> <p>2 well, it -- it may have been in, you know, December of</p> <p>3 2012 with my work on -- with Six4Three. I can't</p> <p>4 remember specifically using it prior to that, but I --</p> <p>5 I can't rule it out.</p> <p>6 Q. And that was the IOS version of the SDK?</p> <p>7 A. I believe at that time I was working</p> <p>8 specifically with the -- the rest API, and my work</p> <p>9 with the IOS SDK began later.</p> <p>10 Q. And what is the rest SDK?</p> <p>11 A. I don't know that there's specifically an</p> <p>12 SDK, but there's an API --</p> <p>13 Q. I'm sorry --</p> <p>14 A. -- available that you can interact with</p> <p>15 via HEP.</p> <p>16 Q. When you were developing the Pikinis app,</p> <p>17 how did you stay informed regarding changes to the</p> <p>18 Facebook Platform?</p> <p>19 A. I received messages periodically about</p> <p>20 breaking changes to the API, none of which affected</p> <p>21 our application during the time I was developing it</p> <p>22 until, you know, after the application had been</p> <p>23 launched.</p> <p>24 Q. Other than receiving messages, did you do</p> <p>25 anything else, such as go to the developer's website?</p> |
| <p style="text-align: right;">Page 119</p> <p>1 A. I did. When I learned of the changes to</p> <p>2 the log-in process, I went to the developer website to</p> <p>3 familiarize myself with those changes.</p> <p>4 Q. And those log-in changes --</p> <p>5 A. That's right.</p> <p>6 Q. -- were part of the Graph API Version 2;</p> <p>7 correct?</p> <p>8 A. That's right, yeah.</p> <p>9 Q. And that -- that change was announced in</p> <p>10 -- on April 30, 2014?</p> <p>11 A. Yes.</p> <p>12 MR. KRIZER: Objection.</p> <p>13 THE WITNESS: That's my understanding.</p> <p>14 It was sometime after that that I actually</p> <p>15 familiarized myself with the change that had been</p> <p>16 announced.</p> <p>17 Q. BY MS. MILLER: Do you know how you</p> <p>18 became aware that changes had been announced?</p> <p>19 A. I don't remember.</p> <p>20 Q. Other than following this announcement,</p> <p>21 had you otherwise reviewed the Facebook developer's</p> <p>22 web page?</p> <p>23 A. I would look at the documentation</p> <p>24 regularly in the course of my work in software</p> <p>25 development.</p> | <p style="text-align: right;">Page 120</p> <p>1 Q. How often?</p> <p>2 A. It would depend on the nature of the work</p> <p>3 I was doing. You know, during times that I was</p> <p>4 working directly with the Facebook API I would refer</p> <p>5 to it frequently. You know, maybe every day. But</p> <p>6 once I had become aware and comfortable with the</p> <p>7 functionality, I no longer needed to look at the site.</p> <p>8 Q. Did you ever speak with other developers</p> <p>9 about the Facebook Platform from -- let's cabin this</p> <p>10 to December 2012 through July 2014.</p> <p>11 A. I recall reading information from other</p> <p>12 developers. I'm not sure that I had actual</p> <p>13 conversations with -- with other developers.</p> <p>14 Q. And since July of 2014 have you had any</p> <p>15 conversations with other Facebook developers about the</p> <p>16 Facebook Platform?</p> <p>17 A. Not personally, no.</p> <p>18 Q. And in the -- I think you said May 2014</p> <p>19 time period when you went to the developer's website</p> <p>20 to read about Graph API Version 2, what did you find</p> <p>21 out about Graph API?</p> <p>22 A. As I recall, the -- the announcement</p> <p>23 focused on the changes to log in, which I knew would</p> <p>24 require some updates to our application. I didn't see</p> <p>25 anything that was very serious. It looked like it</p> |

EXHIBIT 9

| Page 1 | | | Page 2 | | |
|--------|--|--|--------|---|--|
| 1 | SUPERIOR COURT OF THE STATE OF CALIFORNIA | | 1 | APPEARANCES | |
| 2 | COUNTY OF SAN MATEO | | 2 | On Behalf of the Plaintiff: | |
| 3 | ----- x | | 3 | By: David S. Godkin, Esquire | |
| 4 | SIX4THREE, | | 4 | BIRNBAUM & GODKIN, LLP | |
| 5 | Plaintiff, | | 5 | 280 Summer Street | |
| 6 | V. Case No. CIV 533328 | | 6 | Boston, MA 02210 | |
| 7 | FACEBOOK, INC, a Delaware | | 7 | 617-307-6100 | |
| 8 | corporation, and Does 1 - 50, | | 8 | dgodkin@birnbaumgodkin.com | |
| 9 | inclusive, | | 9 | | |
| 10 | Defendants. | | 10 | On Behalf of the Defendants: | |
| 11 | ----- x | | 11 | By: Sonal N. Mehta, Esquire | |
| 12 | VIDEOTAPED DEPOSITION OF | | 12 | DURIE TANGRI, LLP | |
| 13 | THOMAS SCARAMELLINO | | 13 | 217 Leidesdorff Street | |
| 14 | | | 14 | San Francisco, CA 94111 | |
| 15 | April 21, 2017 | | 15 | 415-362-6666 | |
| 16 | 9:10 a.m. | | 16 | smehta@durietangri.com | |
| 17 | | | 17 | | |
| 18 | Conn Kavanaugh Rosenthal Peisch & Ford, LLP | | 18 | Also present: | |
| 19 | Ten Post Office Square | | 19 | Alex Daunais, Videographer | |
| 20 | Boston, Massachusetts | | 20 | | |
| 21 | | | 21 | | |
| 22 | | | 22 | | |
| 23 | Reported By: | | 23 | | |
| | Rosemary F. Grogan, | | 24 | | |
| 24 | RPR, CSR No. 112993 | | 25 | | |
| 25 | Job No. 10031574 | | | | |
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| <p style="text-align: right;">Page 197</p> <p>1 like it was right around the same time.</p> <p>2 And so sitting here today, it is not</p> <p>3 clear to me which of these two versions was operative at</p> <p>4 the time that we made our decision.</p> <p>5 Q. I see. But it would have been either</p> <p>6 Exhibit 66 or Exhibit 67?</p> <p>7 A. Correct. It's one of the two.</p> <p>8 Q. Okay. And the provisions that we talked about</p> <p>9 relating to the special provisions applicable --</p> <p>10 applicable to developers/operators of applications and</p> <p>11 Web sites, in paragraph No. 2, in terms of access and</p> <p>12 use of data, that exists in both versions, right?</p> <p>13 MR. GODKIN: Objection.</p> <p>14 A. Can you show me which --</p> <p>15 Q. Yes.</p> <p>16 A. -- which one you're talking about again?</p> <p>17 Q. Exhibit 66, page 3 of 7.</p> <p>18 A. All right.</p> <p>19 Q. And then Exhibit 67. That's on page 3 of 7 as</p> <p>20 well.</p> <p>21 A. You're asking about the special provisions</p> <p>22 section?</p> <p>23 Q. That's right.</p> <p>24 A. I believe these are identical.</p> <p>25 Q. And then if you can look at Exhibit -- the --</p> | <p style="text-align: right;">Page 198</p> <p>1 the point number 19 about we can create applications</p> <p>2 that offer similar features and services to, or</p> <p>3 otherwise compete with, your application, that is in</p> <p>4 both Exhibit 66 and 67, right?</p> <p>5 MR. GODKIN: Objection.</p> <p>6 A. Yes, if that's the question.</p> <p>7 Q. So whichever version of the SRRs you signed on</p> <p>8 to that paragraph 19 provision was included?</p> <p>9 MR. GODKIN: Objection.</p> <p>10 A. Yes.</p> <p>11 Q. And the limitation of liability clause that we</p> <p>12 discussed earlier, that limitation of liability</p> <p>13 paragraph also exists in both 66 and 67, correct?</p> <p>14 A. I know it exists. I can't tell you, sitting</p> <p>15 here today, if the language is identical.</p> <p>16 Q. But you understood when you signed on to the</p> <p>17 SRRs, that there was a limitation of liability as part</p> <p>18 of the contract that Six4Three was entering with</p> <p>19 Facebook?</p> <p>20 MR. GODKIN: Objection.</p> <p>21 BY MS. MEHTA:</p> <p>22 Q. Right?</p> <p>23 MR. GODKIN: Objection.</p> <p>24 (Witness reviewing)</p> <p>25 A. Yes.</p> |
| <p style="text-align: right;">Page 199</p> <p>1 Q. Was the ability to access Facebook's data</p> <p>2 important to Six4Three?</p> <p>3 A. The ability to access Facebook data was</p> <p>4 critical to Six4Three.</p> <p>5 Q. And you knew that going into the Six4Three</p> <p>6 endeavor, right?</p> <p>7 A. I'm not sure what you mean.</p> <p>8 Q. I mean, it didn't come as a surprise to you at</p> <p>9 some point that you needed to have Facebook data. You</p> <p>10 knew that all along, right?</p> <p>11 MR. GODKIN: Objection.</p> <p>12 A. Ted decided to build an application based upon</p> <p>13 Facebook's promise and representations around data.</p> <p>14 Once that decision was made, that application could not</p> <p>15 function without access to that data. So based upon</p> <p>16 that line of reasoning, yes, it was critical to</p> <p>17 Six4Three that it have access to that data.</p> <p>18 Q. What specific steps did you as the investor</p> <p>19 and adviser to Six4Three take to ensure that you would</p> <p>20 have ongoing access to Facebook data for the Six4Three</p> <p>21 enterprise?</p> <p>22 MR. GODKIN: Objection.</p> <p>23 A. Well, I was aware of Facebook platform and</p> <p>24 Graph API prior to and independent of Ted's decision to</p> <p>25 found Six4Three. And so I have had a number of</p> | <p style="text-align: right;">Page 200</p> <p>1 interactions with other companies, prior to the concept</p> <p>2 of Six4Three, regarding Facebook's representations</p> <p>3 around the Facebook platform.</p> <p>4 MS. MEHTA: Move to strike. Nonresponsive.</p> <p>5 BY MS. MEHTA:</p> <p>6 Q. That wasn't the question. The question was:</p> <p>7 What specific steps did you take as the investor and</p> <p>8 adviser of Six4Three to ensure that Six4Three would have</p> <p>9 ongoing perpetual access to Facebook data?</p> <p>10 A. Like I said, I was very familiar with Facebook</p> <p>11 Platform Graph API and its data. And for the entire</p> <p>12 time that I had become familiar with this massive new</p> <p>13 software application economy, the feedback had been that</p> <p>14 this data is available, it's reliable, it continues to</p> <p>15 be open, Facebook continues to support developers around</p> <p>16 accessing this data.</p> <p>17 And through all of my various</p> <p>18 conversations, even prior to Six4Three, that generated a</p> <p>19 significant comfort level among me and countless other</p> <p>20 investors and startups. Based on that, I then took a</p> <p>21 number of specific steps. First and foremost, we</p> <p>22 reviewed this agreement. Second, we, through our</p> <p>23 discussions with a wide range of other companies, became</p> <p>24 comfortable with the implications of building businesses</p> <p>25 on top of Facebook platform, largely by reviewing</p> |

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| <p style="text-align: right;">Page 201</p> <p>1 Facebook's own representations regarding that platform.</p> <p>2 Q. Other than reviewing the agreement, which I</p> <p>3 think you're referring to the SRRs, and talking to a</p> <p>4 wide range of companies, can you identify any other</p> <p>5 specific steps that you took?</p> <p>6 MR. GODKIN: Objection.</p> <p>7 A. Give me the other thans again. Other than</p> <p>8 what?</p> <p>9 Q. Reviewing the agreement and talking to what</p> <p>10 you described as a wide range of other companies.</p> <p>11 A. Reviewing the representations of Facebook;</p> <p>12 information on Facebook's Web site; representations of</p> <p>13 Facebook's executive in public settings.</p> <p>14 Q. Anything else?</p> <p>15 A. I can't think of anything at the moment.</p> <p>16 Q. You never reached out to Facebook to ask them</p> <p>17 or confirm that you would have perpetual access to</p> <p>18 Facebook data, did you?</p> <p>19 MR. GODKIN: Objection.</p> <p>20 A. There was no e-mail address for Facebook to</p> <p>21 ask such a question.</p> <p>22 Q. So you didn't know how to get in touch with</p> <p>23 them? That's your -- that's your position?</p> <p>24 MR. GODKIN: Objection.</p> <p>25 A. Didn't know how to get in touch with them?</p> | <p style="text-align: right;">Page 202</p> <p>1 Q. Is that what you're saying?</p> <p>2 A. No.</p> <p>3 Q. Let me ask the question again --</p> <p>4 A. I m say ng --</p> <p>5 Q. -- did you ever reach out to Facebook to</p> <p>6 confirm that Six4Three would have perpetual access to</p> <p>7 Facebook's proprietary data?</p> <p>8 MR. GODKIN: Object on.</p> <p>9 A. Facebook aunched th s p atform n 2007. Over</p> <p>10 10 m on app cat ons have been bu t on th s</p> <p>11 p atform. The dea of hav ng to reach out spec f ca y</p> <p>12 to conf rm w th Facebook that such data wou d be</p> <p>13 access b e for a market va ued at over \$220 b on does</p> <p>14 not seem ke t wou d be requ red at that po nt.</p> <p>15 Q. So the answer is that you never reached out to</p> <p>16 Facebook to confirm that you would have perpetual access</p> <p>17 to Facebook's proprietary data, right?</p> <p>18 MR. GODKIN: Object on.</p> <p>19 A. Dur ng what t me?</p> <p>20 Q. During any time prior to April of 2015.</p> <p>21 A. State the quest on aga n.</p> <p>22 Q. I'll ask the question differently. Prior to</p> <p>23 April of 2015, you never reached out to Facebook to</p> <p>24 confirm that Six4Three would have perpetual access to</p> <p>25 Facebook's proprietary data --</p> |
| <p style="text-align: right;">Page 203</p> <p>1 MR. GODKIN: Object on.</p> <p>2 BY MS. MEHTA:</p> <p>3 Q. -- Is that right?</p> <p>4 A. That s ncorrect.</p> <p>5 Q. You reached out to Facebook before April of</p> <p>6 2015 to confirm that you would have access to the data?</p> <p>7 MR. GODKIN: Object on.</p> <p>8 A. Fr st, I d spute your use of the term</p> <p>9 "perpetua ." If you can phrase your quest on w thout</p> <p>10 that term, I can answer t.</p> <p>11 Q. Okay. Let me ask the question this way:</p> <p>12 You -- did you ever reach out to Facebook before April</p> <p>13 of 2015 to confirm that Six4Three would have ongoing</p> <p>14 access to Facebook's proprietary data?</p> <p>15 A. I d spute your use of the term "ongo ng," but</p> <p>16 the answer s yes, I d d.</p> <p>17 Q. Okay. When did you do that?</p> <p>18 A. I contacted a Facebook p atform emp oyee named</p> <p>19 M chae Huang somet me n 2014, ate 2014, I be eve.</p> <p>20 Q. Okay. So -- and we'll talk about that</p> <p>21 interaction in a minute. Let me ask the question</p> <p>22 differently.</p> <p>23 Prior to October of 2014, did you ever</p> <p>24 contact anyone at Facebook to confirm that Six4Three</p> <p>25 would have ongoing access to Facebook's proprietary data</p> | <p style="text-align: right;">Page 204</p> <p>1 for a period of 2, 5 or 10 years?</p> <p>2 MR. GODKIN: Objection.</p> <p>3 A. I don't know.</p> <p>4 Q. You can't identify any instance in which you</p> <p>5 asked that question of Facebook, right?</p> <p>6 MR. GODKIN: Objection.</p> <p>7 A. Is October of 2015 when I contacted</p> <p>8 Michael Huang?</p> <p>9 Q. Yes.</p> <p>10 A. Okay. Can you show me something that</p> <p>11 demonstrates that?</p> <p>12 Q. We'll get to that. What I want to know is --</p> <p>13 A. Well, you're asking me to answer a question</p> <p>14 that I don't know the answer to.</p> <p>15 Q. I'm going to represent to you that your e-mail</p> <p>16 to Michael Huang was dated October 16th, 2014. So my</p> <p>17 question is: Prior to October of 2014, can you identify</p> <p>18 any instance in which you or anyone associated with</p> <p>19 Six4Three reached out to Facebook to confirm that you</p> <p>20 would have ongoing access to Facebook's proprietary</p> <p>21 data?</p> <p>22 MR. GODKIN: Objection.</p> <p>23 A. What do you mean by "ongoing access"?</p> <p>24 Q. That you wouldn't -- that they wouldn't turn</p> <p>25 off your access to Facebook's proprietary data at some</p> |

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| <p style="text-align: right;">Page 205</p> <p>1 point in time in the future.</p> <p>2 MR. GODKIN: Objection.</p> <p>3 A. Still don't know how to address the use of the</p> <p>4 term "ongoing access." You're making it sound like even</p> <p>5 if I were to contact a Facebook employee, I wouldn't</p> <p>6 have ever contacted them stating terms like perpetual</p> <p>7 access or ongoing access. It's an issue that you're</p> <p>8 attempting to create here that was never considered.</p> <p>9 Q. No, I'm not. You said that having access to</p> <p>10 Facebook data was critical to Six4Three, right?</p> <p>11 A. Correct, and then you added the term</p> <p>12 perpetual.</p> <p>13 Q. Okay. Let's -- let's break it down by time,</p> <p>14 then. Let's take a window of five years, okay?</p> <p>15 Prior to October of 2014, did you or</p> <p>16 anyone on behalf of Six4Three ever reach out to Facebook</p> <p>17 to confirm that Six4Three would have access to</p> <p>18 Facebook's proprietary data for five years?</p> <p>19 MR. GODKIN: Objection.</p> <p>20 A. For five years, no.</p> <p>21 Q. For 10 years?</p> <p>22 A. No.</p> <p>23 MR. GODKIN: Objection.</p> <p>24 BY MS. MEHTA:</p> <p>25 Q. For 15 years?</p> | <p style="text-align: right;">Page 206</p> <p>1 A. No.</p> <p>2 MR. GODKIN: Objection.</p> <p>3 BY MS. MEHTA:</p> <p>4 Q. For 20 years?</p> <p>5 MR. GODKIN: Give me a chance to object.</p> <p>6 Objection.</p> <p>7 BY MS. MEHTA:</p> <p>8 Q. For 20 years?</p> <p>9 A. No.</p> <p>10 Q. Prior to October of 2014, did you or anyone</p> <p>11 else on behalf of Six4Three reach out to Facebook to</p> <p>12 confirm that you would have access to Facebook's</p> <p>13 proprietary data for any period of time?</p> <p>14 MR. GODKIN: Objection.</p> <p>15 A. You're asking if I e-mailed a Facebook</p> <p>16 employee, correct?</p> <p>17 Q. Or otherwise asked Facebook.</p> <p>18 A. No.</p> <p>19 Q. I'm going to hand you Exhibit No. 68.</p> <p>20 (Exhibit 68 marked for identification)</p> <p>21 BY MS. MEHTA:</p> <p>22 Q. For the record, this is a Six4Three 892</p> <p>23 through 897.</p> <p>24 Do you recognize this document?</p> <p>25 A. Give me one second.</p> |
| <p style="text-align: right;">Page 207</p> <p>1 (Witness reviewing)</p> <p>2 A. Yes, I recognize this and am familiar with it</p> <p>3 now.</p> <p>4 Q. Okay. And earlier in your testimony, you</p> <p>5 referenced a point at which Facebook actually limited</p> <p>6 the number of API calls that you could make to its</p> <p>7 servers. Do you recall that?</p> <p>8 A. Yes. Facebook limited our access to data on</p> <p>9 July -- July 17th, it appears.</p> <p>10 Q. Okay. And if you look at this document, what</p> <p>11 it says is -- I'm looking at page 894. There's an</p> <p>12 e-mail dated July 17, 2014, at 12:35 p.m.</p> <p>13 Do you see that?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. And that's from Mr. Gildea, right?</p> <p>16 A. Yes.</p> <p>17 Q. And it says, "We got API rate limited." Do</p> <p>18 you see that?</p> <p>19 A. Yes.</p> <p>20 Q. And then it quotes from a Facebook document</p> <p>21 that talks about app level rate limiting. Do you see</p> <p>22 that?</p> <p>23 A. Yes.</p> <p>24 Q. And you're familiar with -- as of July of</p> <p>25 2014, you were familiar with the fact that Facebook had</p> | <p style="text-align: right;">Page 208</p> <p>1 policies in place to limit the API rate for app</p> <p>2 developers, right?</p> <p>3 A. Yes, we were familiar with that as a result of</p> <p>4 our review of Section 2, provision 9, we can limit your</p> <p>5 access to data.</p> <p>6 Q. I understand. I understand that's your</p> <p>7 position, but you also --</p> <p>8 A. I'm just answering the question.</p> <p>9 Q. Well, I don't think you are. Let me -- let me</p> <p>10 be clear. My question is: Did you understand that</p> <p>11 Facebook could limit the API rate, have a rate limit on</p> <p>12 API calls?</p> <p>13 A. Yes, I understood that from the time that I</p> <p>14 reviewed this agreement. (Indicating)</p> <p>15 Q. Okay. And you understood -- and you're</p> <p>16 pointing to the SRRs, right?</p> <p>17 A. Yes.</p> <p>18 Q. Now, you understand that Facebook actually has</p> <p>19 a separate policy with respect to app level rate</p> <p>20 limiting, right?</p> <p>21 A. Correct. Facebook flushes out that policy on</p> <p>22 its app level rate --</p> <p>23 Q. So --</p> <p>24 A. -- limiting page.</p> <p>25 Q. -- so your position is that when Facebook has</p> |

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| <p style="text-align: right;">Page 249</p> <p>1 Six4Three would be able to use version 1.0 forever?</p> <p>2 A. Zuckerberg stated explicitly that Six -- that</p> <p>3 Six -- that companies like Six4Three would be able to</p> <p>4 continue to use version 1.0 and that they would be able</p> <p>5 to choose which version of the API they want to use. He</p> <p>6 never said forever. There's really no such thing as</p> <p>7 forever. But he certainly stated that that would be</p> <p>8 provided on an equal and fair basis.</p> <p>9 Q. But did you -- did you believe at that point</p> <p>10 he was saying that you would be able to use version 1.0</p> <p>11 for five years or 10 years?</p> <p>12 A. We believed that as long as version 1.0 was</p> <p>13 accessible, as long as Graph API was accessible, the</p> <p>14 friends endpoints were accessible, that they would be</p> <p>15 made accessible on an equal, neutral and fair basis to</p> <p>16 all companies that participated in the market.</p> <p>17 Q. And at the time, did you do anything to</p> <p>18 evaluate how long version 1.0 would be accessible?</p> <p>19 A. State the question again. Did we do</p> <p>20 anything --</p> <p>21 Q. Did you do anything to investigate or</p> <p>22 determine how long version 1.0 would be accessible</p> <p>23 following the April 30th, 2014 announcement?</p> <p>24 A. Well, Zuckerberg explicitly stated that it</p> <p>25 would be remain accessible. He never put a time frame</p> | <p style="text-align: right;">Page 250</p> <p>1 on it.</p> <p>2 Q. But did you do anything to figure out how</p> <p>3 long -- I mean you --</p> <p>4 A. Again, you're asking me to solve a problem we</p> <p>5 don't know exists.</p> <p>6 Q. Let me ask the question this way: Did you</p> <p>7 believe at the time that he said that Graph API</p> <p>8 version 1.0 would remain accessible, that it would</p> <p>9 remain accessible for 50 years?</p> <p>10 A. I don't think Zuckerberg's in a position to</p> <p>11 guarantee that Facebook would exist for 50 years.</p> <p>12 Q. What about 10 years? Did you think he was</p> <p>13 guaranteeing version 1.0 for 10 years?</p> <p>14 A. This emphasis on in perpetuity is -- is not</p> <p>15 germane or relevant. As long as it is accessible, it</p> <p>16 will be accessible to everyone on equal terms. At any</p> <p>17 point in time, it could be made inaccessible. Facebook</p> <p>18 could go out of business, for instance, but that means</p> <p>19 it would be inaccessible for everyone, including for</p> <p>20 Facebook to develop its own competitive applications.</p> <p>21 Q. So your view was that Graph API 1.0 -- I'm</p> <p>22 sorry. Strike that.</p> <p>23 Your interpretation at the time of Mark</p> <p>24 Zuckerberg's F8 speech was that Facebook would make</p> <p>25 Graph version 1.0 available to developers for as long as</p> |
| <p style="text-align: right;">Page 251</p> <p>1 Facebook itself had access to friends photos?</p> <p>2 MR. GODKIN: Objection.</p> <p>3 BY MS. MEHTA:</p> <p>4 Q. That was your interpretation?</p> <p>5 MR. GODKIN: Objection.</p> <p>6 A. That is what Zuckerberg and a host of other</p> <p>7 Facebook executives and employees had represented since</p> <p>8 2007.</p> <p>9 Q. And when you say "represented," you mean in F8</p> <p>10 speeches?</p> <p>11 A. Well, our review -- I didn't watch specific</p> <p>12 speeches, but I read transcripts. I went to the</p> <p>13 Web site. We reviewed representations. I read</p> <p>14 articles. I was involved in the software development</p> <p>15 community. I was aware of many representations from</p> <p>16 2007 all the way through to 2014 and '15.</p> <p>17 And most of these representations formed</p> <p>18 a part of my general working knowledge in the software</p> <p>19 business that had nothing to do with Six4Three. And so</p> <p>20 at the time that Six4Three decided to even participate</p> <p>21 in this market, I was already generally familiar with</p> <p>22 not only, you know, these representations that had been</p> <p>23 made for a very long period of time, but with many</p> <p>24 companies who had participated in this ecosystem with</p> <p>25 great success, including many of my friends and many of</p> | <p style="text-align: right;">Page 252</p> <p>1 the people that I've known for quite some time.</p> <p>2 Q. Can you identify any specific representation</p> <p>3 made by Facebook between 2007 and 2014 that you were</p> <p>4 aware of and claim to be relying on as of April of</p> <p>5 2015 -- sorry. April of 2014?</p> <p>6 A. Well, so I wasn't -- Six4Three was relying on</p> <p>7 these representations. I wasn't relying on these</p> <p>8 representations. In terms of my decision to make an</p> <p>9 investment in Six4Three and my belief that that</p> <p>10 investment was a wise decision and would generate a</p> <p>11 return and was being made on the premise of Facebook</p> <p>12 being a stable platform, yes, I could certainly identify</p> <p>13 those.</p> <p>14 Q. What specific representations are you saying</p> <p>15 you relied on?</p> <p>16 A. I mean, the most obvious one that comes to</p> <p>17 mind is the Facebook platform announcement; the Facebook</p> <p>18 platform FAQ --</p> <p>19 MR. GODKIN: Slow down.</p> <p>20 A. -- the various developer blog posts associated</p> <p>21 with the 2007 announcement; the 2010 announcement; the</p> <p>22 various news articles regarding Zuckerberg and Taylor's</p> <p>23 speeches at the 2010 announcement by range of</p> <p>24 representations over an extended period of time.</p> <p>25 Q. Do you have any documentary evidence that</p> |

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| <p style="text-align: right;">Page 269</p> <p>1 there's a reference here to -- on line 16 --</p> <p>2 MR. GODKIN: Which page?</p> <p>3 MS. MEHTA: Page 7.</p> <p>4 BY MS. MEHTA:</p> <p>5 Q. Line 16 says, "\$4,081,950 in enterprise value</p> <p>6 at the time Facebook decided to end access to Graph</p> <p>7 API."</p> <p>8 Do you see that?</p> <p>9 A. Yes.</p> <p>10 Q. So what date is that referring to?</p> <p>11 A. So the valuation of Six4Three was established</p> <p>12 based on my discussions with Ted. And so the 4,000 --</p> <p>13 the 4,081,950 is simply the number of outstanding units</p> <p>14 multiplied by the price per unit. #2 received a portion</p> <p>15 of its units based on that capital investment, and then</p> <p>16 it received a portion of those units based upon the fact</p> <p>17 that it was, basically, responsible for the ability of</p> <p>18 Six4Three to exist.</p> <p>19 So it's roughly representing a</p> <p>20 \$3.75 million premoney valuation, which for a seed</p> <p>21 company is very low. If you look at the average seed</p> <p>22 valuation today, it's roughly \$6 million. So this</p> <p>23 represents a -- what? You know, 33 percent discount</p> <p>24 relative to the average seed valuation for financing of</p> <p>25 today.</p> | <p style="text-align: right;">Page 270</p> <p>1 Q. And when you say average seed valuation</p> <p>2 finances done today, what specific technology sectors or</p> <p>3 industries are you referring to?</p> <p>4 A. It refers to venture backed software startups.</p> <p>5 Q. Can you be any more specific than that?</p> <p>6 A. I believe the data I'm referring to comes from</p> <p>7 one of those organizations like PitchBook. I don't</p> <p>8 recall specifically. But I just attended a CEO summit</p> <p>9 with one of my VCs, and we spent lots of time talking</p> <p>10 about this data.</p> <p>11 And one of the numbers that was noted is</p> <p>12 that \$6 million, according to -- whether it's PitchBook</p> <p>13 or one of these other platforms for these seed data --</p> <p>14 MR. GODKIN: Slow down.</p> <p>15 A. -- \$6 million was the -- the average premoney</p> <p>16 valuation for a seed round.</p> <p>17 Q. What do you think the -- strike that.</p> <p>18 Do you know what the average premoney</p> <p>19 valuation for a seed round for an app in 2012 or 2013</p> <p>20 was?</p> <p>21 A. No, but that's something that somebody could</p> <p>22 find out.</p> <p>23 Q. And do you know what the average premoney</p> <p>24 valuation for a seed round for image recognition app was</p> <p>25 in 2012 or 2013?</p> |
| <p style="text-align: right;">Page 271</p> <p>1 A. If I don't know the answer to the first, I</p> <p>2 can't know the answer to the second.</p> <p>3 Q. Do you know what the average premoney</p> <p>4 valuation for a seed round of an image recognition app</p> <p>5 is at any point in time since 2012 to the present?</p> <p>6 A. Off the top of my head, sitting here right</p> <p>7 now, I cannot give you a specific number, although, as</p> <p>8 someone who's been investing in this business, I have</p> <p>9 done research on this and there are comps out there.</p> <p>10 Q. For image recognition software startups?</p> <p>11 A. There's data around recognition software and</p> <p>12 other startups. I don't know if there has been a</p> <p>13 venture, you know, backed report specifically around</p> <p>14 image recognition.</p> <p>15 Q. Can you identify any evidence of what a</p> <p>16 premoney seed valuation for an image recognition startup</p> <p>17 would have been at any point in time from 2012 to 2015?</p> <p>18 A. Yes. They're roughly equivalent to most other</p> <p>19 software businesses; SAS businesses, consumer</p> <p>20 businesses. Roughly speaking, if you're developing a</p> <p>21 subscription product, right, a turnkey subscription</p> <p>22 software service, and you're seeking money from the</p> <p>23 venture capital community, and you're seeking your first</p> <p>24 nonfriends and family financing, your first seed</p> <p>25 financing, then, roughly speaking, your valuation is</p> | <p style="text-align: right;">Page 272</p> <p>1 going to be somewhere in the 3 to \$10 million premoney</p> <p>2 range.</p> <p>3 Q. And can you think of an example of a</p> <p>4 subscription-based service that has a valuation of 3 to</p> <p>5 \$10 million?</p> <p>6 MR. GODKIN: Objection.</p> <p>7 BY MS. MEHTA:</p> <p>8 Q. Anything that comes to mind?</p> <p>9 A. Sorry. You're asking me to identify a company</p> <p>10 that has raised money at a 3 to \$10 million valuation?</p> <p>11 Q. On a subscription-based model.</p> <p>12 A. I mean, just look at any VC Web sites.</p> <p>13 Q. How --</p> <p>14 A. Most -- most all of those companies, if they</p> <p>15 haven't raised a Series A, the money they raised was in</p> <p>16 a valuation within that range.</p> <p>17 Q. Are you -- are you aware of food delivery</p> <p>18 subscription services like BlueApron?</p> <p>19 A. I know of BlueApron. Sure.</p> <p>20 Q. Okay. And would you consider the premoney</p> <p>21 seed valuation for a food delivery, dinner delivery</p> <p>22 service, like BlueApron, to be the same as an image</p> <p>23 recognition subscription-based model?</p> <p>24 A. Valuations in the on-demand delivery space,</p> <p>25 from my standpoint, should be much lower than the image</p> |

EXHIBIT 10



f8 Event and Facebook Platform FAQ

What is f8?

f8 was an event held at the San Francisco Design Center on May 24, 2007, during which Mark Zuckerberg unveiled the next evolution of Facebook Platform. The event included an eight-hour "hackathon," where both Facebook engineers and outside developers collaborated on building new applications on the new Facebook Platform.

What is a "hackathon"?

A hackathon is an all-night coding event during which Facebook engineers work on any project that interests them. Facebook uses the word "hackathon" to refer to a gathering of engineers, who possess technical expertise and collaborate on innovative projects. Facebook has a tradition of holding frequent developer hackathons, which have spawned some of the most popular features and applications on the site.

What is Facebook Platform?

Facebook Platform is a development system that enables companies and developers to build applications for the Facebook website, where all of Facebook's 24 million active users can interact with them. Facebook Platform offers deep integration into the Facebook website, distribution through the social graph and an opportunity to build a business.

What is the social graph?

The social graph is at the core of Facebook. It is the network of connections and relationships between people on Facebook and enables the efficient spreading and filtering of information. Just as people share information with their friends and the people around them in the real world, these connections are reflected online in the Facebook social graph.

What is a Facebook application?

A Facebook application uses Facebook Platform to access information from the social graph, offering users an experience that's relevant to them. Facebook applications can plug into the Facebook website in a number of ways: applications can be embedded on users' profile pages, reside on their own separate pages (called "canvas" pages), or live through desktop applications using data from the Facebook social graph.

What's new in Facebook Platform?

We've been adding functionality since Facebook Platform first shipped in beta in August 2006. With the latest evolution of Facebook Platform however, third-party developers can now create applications on the Facebook site with the same level of integration as applications built by internal Facebook developers. Now developers everywhere have the ability to create Facebook applications that deeply integrate into the Facebook site, as well as the potential for mass distribution through the social graph and new business opportunities.

Why did Facebook launch Facebook Platform?

Our engineers have created great applications for Facebook, but we recognized that third-party developers can help us make Facebook an even more powerful social utility. Facebook Platform gives developers everywhere the tools to create applications that we just wouldn't have the resources to build in-house, and those applications make Facebook an even better way for our users to exchange information. Developers also benefit from Facebook Platform as it gives them the potential to broadly distribute their applications and even build new business opportunities.

What kinds of applications can be built on Facebook Platform?

The kinds of applications developers can build on Facebook Platform are limited only by their imaginations. Because applications are based on the Facebook social graph they can be more relevant to users, keeping people in touch with what and whom they care about. We've already seen a variety of applications built by our developer partners, including those for sharing media files, book reviews, slideshows and more. Some of the



possibilities of Facebook applications are illustrated in the Facebook Platform Application Directory, available at <http://www.facebook.com/apps>.

Are there any restrictions on what developers can build?

Developers are encouraged to exercise their creativity when building applications. Of course, all applications are subject to the Terms of Service that every developer agrees to, which include basic requirements such as not storing any sensitive user information, not creating any offensive or illegal applications, and not building anything that phishes or spams users. And users will always have the power to report any applications that compromise Facebook's trusted environment, keeping our users' information safe.

What are the benefits of Facebook Platform for users?

With Facebook Platform, users gain the ability to define their experience on Facebook by choosing applications that are useful and relevant to them. Now that they have access to a virtually limitless set of applications from outside developers, users have an unprecedented amount of choice. They can share information and communicate with their trusted connections in ways that would never have been possible before Facebook opened its platform.

How do users add applications to and remove applications from their account?

If a user sees an application she likes on a friend's profile, she can add it to her account by clicking the "Add" link on the application's profile box. She can also add new applications by navigating to the application's specific page in the Facebook Platform Application Directory and clicking "Add Application" in the top-right corner. To remove an application, she first clicks "Applications" on the left navigation bar. From there, she can "Remove" any of the applications in her account, whether they are built by a developer partner or by Facebook.

What are the privacy controls for Facebook Platform, and what kind of user information can be shared?

On Facebook, users are always in control of their information and can choose how much of their information is made available to specific applications. With Facebook Platform, we're offering additional privacy controls and requiring that third parties treat user information with the same respect we do—and our users have come to expect. Users can also choose to completely opt out of making their data available through Facebook Platform. Applications can never violate users' basic privacy settings and are meant to provide users with a better opportunity to share their information with their friends and networks.

What do third-party applications do with user information?

Applications built by third parties are required to respect Facebook users' privacy preferences. Third-party applications allow users and their friends to share information in new ways, without affecting the security and privacy that they've always enjoyed on Facebook.

How many applications are there for Facebook Platform?

At f8, we are launching with over 85 applications from more than 65 developer partners, and that's only the beginning. We're encouraging interested developers everywhere to create Facebook applications. We have no limits on the number of applications that can be created.

What differentiates Facebook applications from widgets on other sites?

Facebook applications are deeply integrated into the site and take advantage of the network of real connections through which users share information and communicate—what we call the "social graph." Widgets are typically single-purpose Flash add-ons to a web page (i.e., displaying a single video) that are not fully integrated into a site nor are aware of the social context among users.

How will Facebook maintain its minimalist style if users can add and move applications around on their profile?

We're giving our users the choice to add applications and control their placement in their profiles, but we're not changing the essential layout and familiar style of the Facebook site. Facebook applications are focused on providing new ways to spread information on Facebook, not about redesigning the way a profile looks. For example, users will not be able to change the site background, add music that plays when their profiles load, or



insert animation into their profiles. Individual applications may play media, music or animations but only when a visitor to that profile interacts with them.

How will Facebook deal with applications that compete with one another or even compete with Facebook-built applications?

We welcome developers with competing applications, including developers whose applications might compete with Facebook-built applications. Many applications are likely to offer similar features. We've designed Facebook Platform so that applications from third-party developers are on a level playing field with applications built by Facebook. Ultimately, our users will decide which applications they find most useful, and it is these applications that will become the most popular.

How will Facebook monetize Facebook Platform?

All the great applications built by our developer partners provide a service to our users and strengthen the social graph. The result is even more engaged Facebook users creating more advertising opportunities.

Can Facebook applications include ads?

We want to enable developers to build a business on their Facebook applications, so we're giving developers the freedom to monetize their applications as they like. Developers can include advertising on their applications' canvas pages, though no advertising will be allowed within the application boxes that appear within user profiles.

Are you going to share revenue with developers?

While revenue sharing is not available at launch, we are looking into ways to share advertising revenue with developers. This version of Facebook Platform already lets developers monetize their applications as they like, whether they choose to offer it for free or build a business on their application.

What are the key technical elements of Facebook Platform?

Facebook Platform offers several technologies that help developers use data from the social graph. In addition to the Facebook API, this recently launched version of Facebook Platform introduces Facebook Markup Language (FBML), which enables developers to build applications that deeply integrate into the Facebook site. Facebook Platform also includes Facebook Query Language (FQL), which lets developers use a SQL-style interface to query the data they can access through the API.

For more details on the technology behind Facebook Platform, check out the Facebook Developer site at <http://developers.facebook.com>.

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EXHIBIT 11

REDACTED FOR PUBLIC FILING

EXHIBIT 12

REDACTED FOR PUBLIC FILING

EXHIBIT 13

REDACTED FOR PUBLIC FILING

EXHIBIT 14

REDACTED FOR PUBLIC FILING

EXHIBIT 15

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EXHIBIT 16

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EXHIBIT 27

UNSEALED VERSION OF DOCUMENT PURSUANT TO THE NOVEMBER 1, 2018 ORDER

Facebook Daily News- Friday Morning
October 5th, 2012
Full Text Articles

Must Read

Facebook: The Making of 1 Billion Users
Bloomberg Businessweek
By Ashlee Vance
October 5th, 2012

<http://www.businessweek.com/articles/2012-10-04/facebook-the-making-of-1-billion-users>

The team in charge of tracking Facebook's (FB) growth works on the second floor of Building 17. Most days, the offices are like anywhere else at Facebook: whiteboards, toys on desks, shorts and flip-flops, pretty low-key. Around noon on Sept. 14, the second floor was packed. In one of the common areas, a giant screen showed the number of active Facebook users worldwide. About 100 people, including Mark Zuckerberg and his top lieutenants, watched the numbers run up by about a thousand users per minute: 999,980,000 ... 999,990,000 ... 1,000,000,000. The counter paused for a moment when it rounded 10 digits, as if to emphasize the point: 1 billion users.

The celebration was less exuberant than one might imagine given that Facebook had just officially registered one-seventh of earth's population. Zuckerberg had thought about doing the whole balloons-and-visit-from-Ryan-Seacrest thing when they located lucky user No. 1,000,000,000. The problem, though, was that the occasion was really more of a notional event, like when the United Nations announces the world's population. Facebook's vast array of computers handles so many users doing so many things, the best they can do is make a statistical calculation. After a few minutes of hoots, high-fives, and good cheer, Zuckerberg and his employees did what they usually do after major achievements: They went back to work.

"I don't even know if we knew who the billionth person was," Zuckerberg says about two weeks later. He's sitting outside at the company's sprawling Menlo Park (Calif.) campus, resting his arms on a tiny café table. In his usual rapid-fire delivery, Facebook's 28-year-old chief executive officer explains that his aversion to overt jubilation goes back to the earliest days of his company, when it was still a dorm room operation at Harvard. "We have this ethos where we want to be a culture of builders, right? We don't want to overly celebrate any particular milestone," he says. He knew even in college that a company would soon unite a huge portion of humanity via a single social service, he just wasn't sure it would be his. "We were just these college students, and who were we to build this big thing?" he says. "Clearly, there were other companies used to building software at scale, and one of them would do it."

Facebook got there first for a lot of reasons, many of them familiar to anyone who saw the movie *The Social Network*: Zuckerberg's ambition, knack for addictive widgets, and what some would call supreme ruthlessness. The more impressive reasons, though, have to do with the culture he established, which is expressed in the motivational posters around the company's offices: "Move Fast and Break Things."

Facebook absorbed Silicon Valley's hacker ethos and amplified it. Tech companies normally do controlled beta versions of their technologies; Facebook doesn't beta anything. It runs as an unending

series of quick, on-the-fly tests with actual customers. Engineers race to put up new features, see if they work, and make tweaks to fix them if they don't. Even trainees who haven't finished their six-week indoctrination program are asked to work on the live site. The live site, by the way, runs on custom-designed hardware and software housed in Facebook's superefficient, and experimental, data centers. Every now and again the whole site crashes, but Zuckerberg can live with that. "The faster we learn, the better we're going to get to the model of where we should be," he says.

The learn-on-the-go philosophy regularly blows up in Zuckerberg's face. He and his team periodically revamp Facebook's privacy policy, triggering a predictable chain reaction: consumer outrage, company walkback, adjusted policy, re-release, lessened outrage, and so forth until the furor dies down. Unlike with computer algorithms that temporarily crash the system, however, these iterations are apt to leave lasting damage to Facebook's reputation.

Then there's the initial public offering, perhaps Facebook's biggest face plant. The company set out to maximize its offering price and succeeded, raising \$16 billion when it went public last May. Then it watched the stock sink from \$38 a share all the way to less than \$20, slicing its market value in half. The foundering stock price has hardened doubts about the strength of its business model, and may make it difficult for Facebook to retain talent. Regulators are looking at whether the banks underwriting the offering selectively shared information with top clients. Multiple plaintiff groups have filed suits in federal and state courts, alleging that Zuckerberg, Facebook, and its investment banks misled investors about the social network's revenue outlook. Facebook says the suits lack merit.

"The performance has obviously been disappointing. I mean, we care about all the investors, and that's really important," Zuckerberg says. "I suppose there could be short-term things that we could do, but we're not going to focus on those; we're going to focus on the long-term stuff."

If the Hacker Way, as Zuckerberg calls Facebook's culture, is an awkward tool for dealing with Washington and Wall Street, it's been extremely effective for building a service that can handle the social needs of a billion people. Sites such as Google (GOOG) and Amazon.com (AMZN) have the luxury of preparing the majority of the user experience in advance. Google catalogs the Web and has already decided what to show you before you even search for something. At Amazon, a box of pretzels is a box of pretzels; the pretzel page doesn't upload videos of itself, crowdsource for beverage pairings, or share wedding pictures.

Photographs by Rick Friedman/Corbis; Sherry Tesler/Polaris; Markham Johnson/Polaris; Finalpixx/Newscom; Gary Miller/FilmMagic/Getty Images; Peter Foley/EPA/Corbis; Marcio Jose Sanchez/AP Photo; Steven Senne/AP Photo; Tomohiro Ohsumi/Jana Press/ZUMA Press/Corbis

Facebook builds a custom Web page every time you visit. It pores over all the actions your friends have taken—their photos, their friends, the songs they listen to, the products they like—and determines in two-hundredths of a second which items you might wish to see, and in what order. Each day, Facebook processes 2.7 billion "Likes," 300 million photo uploads, 2.5 billion status updates and check-ins, and countless other bits of data, and uses that mass of transactions to guesstimate which ads to serve up. To manage the load, Facebook has created the world's largest, most efficient data-crunching machine.

"I think Facebook has the hardest information technology problem on the planet," says Mike Stonebraker, a computer scientist and longtime professor at the University of California at Berkeley. "A

company like Google certainly does innovative stuff, but Facebook solves the harder problem.” The company is essentially building a system that will serve as the model for the next wave of computing in which trillions of sensors, smartphones, and medical devices issue streams of data that must be analyzed instantly. So far, Facebook actually has this monstrosity working.

Before Facebook moved in last year, the campus in Menlo Park was the headquarters of Sun Microsystems. It pushes up against marshlands and salt ponds along the San Francisco Bay, which gives the air a faint stench when the wind blows a certain way. Zuckerberg nevertheless likes to take meetings outside and today holds forth in the central courtyard. He has a speechwriter now, and his answers have been molded by a few years of intensive media training. “It’s really humbling to get a billion people to do anything,” he says.

Zuckerberg visibly relaxes as the conversation turns to Mike Schroepfer, his vice president of engineering. While much of the world knows Sheryl Sandberg, Facebook’s chief operating officer, they do not know Schroepfer, whose desk is right next to Zuckerberg’s.

Schrep, as everyone at Facebook calls him, arrived four years ago from Mozilla, where he led the development of the Firefox Web browser. No person outside of Zuckerberg has had more influence on Facebook’s engineers and the construction of the company’s massive and growing infrastructure. “He’s the cultural center of the engineering team,” Zuckerberg says. Facebook’s engineers have taken to decorating their pages with Schrep images fashioned to look like the iconic Obama posters from the 2008 campaign. “People just, like, love him,” says Zuckerberg.

It’s Schroepfer who ensures the tweaking never stops. He’s been instrumental in developing the company’s obsession with what’s known in Silicon Valley as A/B testing. This is the process by which engineers compare one version of a Web page to another to see which generates the most interest. You might make one version of a menu red and another blue, then run data analysis to gauge their performance. At any given moment, Facebook has tens of thousands of A/B tests running. It may be trying to decide which version of an ad plays best to a particular crowd or how to word the options in a menu. This is how Facebook discovered that people got stressed out and left the site when they were asked if they wanted to “reject” a friend request. The engineers found the noncommittal “not now” kept people logged on. “Engineers understand data,” Schroepfer says. “The trick is some of these details really matter and some don’t.”

During a meeting in a conference room near his desk, Schroepfer leads a group of engineers in a half-hour debate over the design of a restaurant review feature. Should it have a five-star rating option, a Like button, or both? Should there be animation? Does it feel natural? At the end of the meeting, Schroepfer and one other guy remain at odds over the Like vs. Stars question. “This is probably just a data gap between your brain and my brain,” Schroepfer says. The A/B tests have since begun.

The de facto proctor of these tests is Chuck Rossi. In a company full of people trying to establish their wackiness, Rossi stands out. To the left of his desk he has a large, fully stocked Tiki bar with a lot of Scotch. Used targets have been stapled to the bar—Rossi is a competitive marksman, and sometimes conducts offsites at shooting ranges. “The booze we do separately,” he hastens to add.

Rossi is Facebook’s release engineer, the overlord of a ritual the company calls “the push.” This is the moment when Facebook refreshes its source code with a new version. In the past, it wasn’t uncommon for the push to bring down all of Facebook, but now things tend to run more smoothly. Most software

companies take months to pull together the code in their flagship products, check it for errors, and get it ready to ship. Rossi used to have a similar job at Google, and says that famously fast-moving company did its equivalent of the push every couple of weeks while he was there. Facebook redoes its site once a day, usually at around 4:30 p.m. West Coast time.

As push time approaches one evening in August, Rossi is relatively calm. All day, Facebook's engineers have been sending him new bits of code they want added to the site. The company's engineers typically submit about 300 tweaks per push. On Tuesdays, there's a bigger push that incorporates thousands of changes.

Rossi and a handful of other people review the tweaks, approve some, and kick back the rest for improvement. The engineers, proud of their ideas, often try to charm Rossi into approving their code. They gather in chat rooms to try to convince him that it's crucial that their changes go in today's push. When tomorrow is absolutely not an option, the engineers leave their desks and make their way to Rossi with an offering—hence the Scotch selection at the Tiki bar. “A little bribe never hurts,” he says. “I love cupcakes, too.”

Facebook has developed dozens of tools to catch the mistakes of its engineers. Rossi's computer screens—which he's programmed to look like The Matrix, with green text cascading down a black background—have them all on display. One tool analyzes code to see how dramatic a change is and what mechanisms it will affect. The same program tells Rossi about the level of discussion among product teams about the merits of this new feature. Was it rejected once, fixed, and then accepted? Or did it have 32 comments, 11 updates, and 6 rejections before reaching him? Another application alerts him if something is likely to break. “I actually think as we've gotten more mature, we've focused a little bit less on the ‘break things’ part of ‘break things and move fast,’” Zuckerberg says. “One of the things that we've realized is that as we've gotten bigger, it is possible to make so many mistakes that you're actually moving slower because you're spending a lot of time fixing mistakes.”

As the afternoon wears on, Rossi decides—Scotch and cupcakes be damned—that he's got to stop taking new changes. He begins the push by releasing the updated site first to Facebook employees, and then to about 2 percent of Facebook's users. He brings up another set of windows to see how long the tasks are taking, how well Facebook's servers are running, and whether there's any unusual surge of hostile tweets. When something goes wrong, an alarm sounds and the affected window on his screen turns red. “If this board is green, we are good,” Rossi says. A screen flashes green. He patters on his keyboard, and today's Facebook push goes out to all 1 billion users. “It's like giving birth,” he says.

From their first day of employment, Facebook engineers are expected to dig into the software that runs the site. Trainees in the six-week Boot Camp sit in a large workroom amid huge banks of desks with massive Dell (DELL) monitors. Under the supervision of “code mentors,” easily spotted by their giant sombreros and other outlandish hats, new hires hunt for minor glitches in the 1.5 gigabytes of source code that runs Facebook.

Some Boot Campers break stuff. Jocelyn Goldfein came to Facebook in mid-2010 from VMware (VMW). Despite an impressive résumé, she still had to go through Boot Camp with the college kids. Near the end of her six weeks, she activated the product she'd been working on, and it flooded Facebook's internal network with meaningless traffic, taking down the e-mail system for an entire day. “I turned off Mark Zuckerberg's e-mail,” she says, still shuddering. “This is not how I wanted to introduce myself.” No one reprimanded her. “People showed up and were curious about why this was happening and wanted to

know what I was trying to accomplish," she says. "No one was like, 'How dare you!' And that was unique in my experience."

At some point during their training, the engineers are divided into groups of about 30. They're taken past a kitchen with free candy bars, a video game arcade, and a vending machine that spits out free keyboards and memory sticks. The recruits end up in a conference room, plop down in plastic chairs, and await a lecture from Schroepfer.

Schrep makes his way to the front of the room and pushes his black glasses up his nose. Of average build and with an orthodontist's countenance, he's known as that supersmart guy you want to impress. The recruits—all but a couple are male—go quiet as Schroepfer's first PowerPoint slide hits the projection screen. He begins by asking the employees where they last went to school or worked: Stanford, Northwestern, Princeton, Duke; CBS Interactive (CBS), Microsoft (MSFT), Yahoo! Research (YHOO), Google, and Amazon.com. "I want to talk about how Facebook is different than any organization you have been in," he says.

Schroepfer explains that in Facebook's olden days—that would be 2008—the engineering team had 150 people. Everyone knew each other, hopping from project to project was easy, and the site adapted quickly to competitive threats. The company now has 1,000 engineers and expects to add hundreds more this year. Boot Camp, Schroepfer explains, is an attempt to fight the natural creep of bureaucracy that comes with rapid expansion. He says big tech companies typically spend a day or a week indoctrinating new employees, mostly to explain 401(k) options and how to file expense reports. "Then, boom, you're deposited in your team." The employees become part of "warring tribes" that fixate on a single product, he says.

During Boot Camp, the Facebook hires see the company's entire code base. They're asked to work on Timeline for a bit and then to try out the Mobile app and familiarize themselves with the inner workings of News Feed. At the end of the process, they choose which product team to join. "We don't assign you to a team," Schroepfer says. "We want to make sure you are working on something you are good at and passionate about." At Facebook, he says, you can come up with a new idea today and "half a billion people will use your product tomorrow."

Facebook has grown from 600 employees in 2008 to 3,976 as of June 2012. "We have this stat that we throw out all the time," says Zuckerberg. "There is on the order of 1,000 engineers and now on the order of a billion users, so each engineer is responsible for a million users."

Even as it expanded its engineering corps, Facebook had to expand its hardware, and three years ago Zuckerberg and Schroepfer decided that the company should stop leasing data center space and build its own facilities. They put together a team of about a dozen people. A few months later, Facebook began constructing a 330,000-square-foot complex in Prineville, Ore., a sparsely populated farming and ranching town that has cheap power and plenty of broadband access.

Building another megadata center wasn't enough for Zuckerberg and Schroepfer, however. They wanted to experiment with a different design. Instead of using massive air conditioning systems to keep thousands of servers from overheating, the Prineville facility has giant, slatted vents on its sides that let in air as needed. A series of fans, filters, and water misters then clear the air, cool it, adjust its humidity, and guide it deeper into the building. Eventually the air flows to the rows of server racks below. All this happens automatically, with computers deciding how to guide the process.

Most of the software running these data centers was likewise built from the ground up or modified by Facebook engineers. The company has invented ways to get thousands of computers to work in unison. It also has several labs at its headquarters where it designs servers and storage systems. Its engineers strip out nonessential components and test various motherboard configurations to see how much heat and power they can withstand. Instead of buying its computers from a Dell or Hewlett-Packard (HPQ), Facebook has them manufactured by Asian suppliers.

The Prineville data center may be the most energy-efficient in the world. According to a standard measurement developed by an industry consortium, almost all the electricity goes to the computers as opposed to powering cooling systems or dissipating as heat. The company is building a half-dozen similar centers in Oregon, North Carolina, and Sweden.

As those come online, Facebook will be able to handle more Likes, pictures, and status updates, and the ads that go along with them. "There is this Facebook equivalent of Moore's Law," Zuckerberg says. "Each year the amount of stuff that each individual shares is growing at this exponential rate. And that lets us project into the future and say, 'OK, two years from now people are going to be sharing twice as much, [in] three years, four times [as much], four years, eight times as much.'"

The more Facebook grows, the more expansive its services can become. "We are trying to map out the graph of everything in the world and how it relates to each other," says Mike Vernal, one of the company's top engineers. The goal, he says, is to record every book, film, and song a person has ever consumed, then build a spectacular model of other things that person could enjoy. Take that vision to its logical end: You show up in a strange city and Facebook tells you what bar to go to. When you get there the bartender has your favorite drink waiting, and you're able to look around the room and see if anyone there went to your college or likes the San Francisco Giants. You may find this kind of universal social mapping exciting, or creepy. Zuckerberg describes it as inevitable. "At some point," he says, "that will start to be a better map of how you navigate the Web than the traditional link structure." By "traditional link structure," he clearly means the basis of Google searches.

Zuckerberg says he hopes to bring Facebook to China, where it's currently banned by the government, though he doesn't think that will happen soon. The company's biggest growth opportunity is mobile: "There are actually already 600 million people using Facebook on phones, so that's growing really quickly. And as more phones become smartphones, it's just this massive opportunity."

Zuckerberg's embrace of mobile will strike some shareholders as late in coming. In February, Facebook disclosed in an S1 regulatory filing that mobile usage didn't generate meaningful revenue. More recently, executives have tried to reverse that sentiment by touting preliminary test results that show the company's ads on mobile phones are 13 times more likely to be clicked on than ads on the desktop. Renewed faith in the company's mobile ads has been partly responsible for a mini-rally in its stock, pushing the price above the more dignified threshold of \$20 for the first time since mid-August.

"We make more mistakes than other companies do," Zuckerberg says. "You can't have everything, so you just have to choose what your values are and where you want to be. For example, Microsoft has a huge focus on really rigorous, bug-free code. That's cool. I think that's the right decision for a lot of the markets they're in. But for us, this is the right way to go."

In December 2010, Facebook users who were paying attention began noticing something strange about the site. Some people were able to see a new product called Memories, while others noticed a new interface for Photos. The site seemed to be rolling out dozens of products, and many looked unfinished. For about 30 minutes, people filled Twitter with chatter, trying to figure out what was going on.

At its headquarters, people were freaking out. The move-fast culture had resulted in one engineer accidentally releasing all of Facebook's top-secret projects to the public. Memories, for example, was an early version of what would become Timeline. Most companies keep sensitive projects cordoned off on special systems. Facebook, remember, gives every engineer equal access to its code.

The engineers flew to their internal chat system and tried to devise a plan for fixing the breach. The problem, though, was that Facebook runs on thousands upon thousands of servers. Try as they might, the engineers could not recall the leaked features. Jay Parikh, vice president of infrastructure engineering, decided to take the drastic step of disconnecting Facebook from the Internet. He logged into one of the social network's central servers and erased all the Internet addresses people would use to get to Facebook.com.

Once he made Facebook invisible to the world, Parikh knew he had to tell Zuckerberg. Not pleasant, even at a company where failure is an option. "I ran upstairs to talk to Mark," Parikh says. Zuckerberg replied, "That sucks."

A short while later, Zuckerberg tried to ease the tension. "I got all my direct reports together," he says. "They were all a little nervous. I was like, 'Guys, I told you NOT to ship everything. Maybe I'll say the "not" a little louder next time.'"

Facebook (FB) Celebrates a Billion Users With a New Advertisement
ABC News
By Joanna Stern
October 4th, 2012

<http://abcnews.go.com/Technology/facebook-fb-celebrates-billion-users-advertisement/story?id=17395596#.UG7Y BxLomp>

"Chairs Are Like Facebook." That's just one of the tag lines in Facebook's new ad released today on the web to celebrate the company's milestone of hitting one billion users.

Mark Zuckerberg announced the major achievement on Facebook this morning. "This morning, there are more than one billion people using Facebook actively each month," Zuckerberg wrote in the blog post. "If you're reading this: thank you for giving me and my little team the honor of serving you."

Facebook actually reached the billion-user record last month on Sept. 14. With that stat, Facebook is also pointing out that there have been over 1.13 trillion likes, 140.3 billion friend connections, 219 billion photos uploaded since the launch of the service in February 2009.

Facebook
Facebook's first ad, which appeared, Oct. 4,... [View Full Size](#)

Pittsburgh Hostage Taker Posts on Facebook Watch Video

Facebook Stock: Should Zuckerberg End Honeymoon? Watch Video

Facebook CEO Mark Zuckerberg Speaks for First Time Since IPO Watch Video

The 90-second ad, which you can view here, will appear on Facebook.com for now, but according to AllThingsD it might see some TV airtime and some placement on other websites in the future. It was created by Wieden+Kennedy, the the same agency responsible for Nike's ads. Alejandro González Iñárritu, who directed "Amores Perros," was the director, says Ad Age.

The ad and the milestone come as Facebook continues to face pressure from Wall Street and the public about its disappointing IPO (Mark Zuckerberg's adjective, not ours). When the company first sold stock on May 18, it offered a price of \$38 per share, but the stock quickly fell about 50 percent. Yesterday, the stock closed at \$21.83.

Earlier this week, Facebook's new advertising policies raised some privacy concerns. The new Custom Audiences advertising feature allows marketers to target their ad or sponsored story to a specific set of users using phone numbers or email addresses posted on the site.

Facebook COO Sheryl Sandberg defended the new feature and stated that "we never sell user information, we don't make money when you share more, and we do not give your information to marketers."

She added: "People will on use Facebook if they trust us."

Whether each of its billion users trust Facebook is a story unto itself, but like chairs, Facebook is providing a place for people to sit and get together on the web.

Facebook Related

Facebook IPO Suits To Be Handled In New York

The Wall Street Journal

By Telis Demos and Aaron Lucchetti

October 5th, 2012

<http://professional.wsj.com/article/SB10000872396390444223104578037321776713546.html?mg=reno64-wsj>

A federal judicial panel ruled that a variety of lawsuits pertaining to the Facebook Inc. initial public offering would be handled in the U.S. District Court for the Southern District of New York, giving the social-media company a procedural victory in the closely watched cases.

The U.S. Judicial Panel on Multidistrict Litigation disclosed in an order Thursday that "the Southern District of New York is an appropriate transferee district for pretrial proceedings." It noted that 26 of the actions involving the Facebook IPO are already pending in that court before Judge Robert Sweet, including seven of the eight cases involving Nasdaq OMX Group, which owns the exchange where Facebook stock trades.

The various cases involving the botched IPO concern system errors on Nasdaq which led to confusion about investors' orders on Facebook's first day of trading, as well as allegations that Facebook and its underwriters didn't disclose enough about trends in the company's mobile applications that many analysts believed might hamper Facebook's expected earnings growth.

Facebook and others argued the cases should be consolidated in one court. The panel noted that there is some factual overlap between the two sets of cases and many of the underwriters and Nasdaq are located in New York.

In a statement, a Facebook spokeswoman said: "We are pleased the MDL Panel granted our motion to transfer these actions to the Southern District of New York. As we've said from the outset, we believe these lawsuits are without merit and will defend ourselves vigorously."

A Nasdaq spokesman couldn't be reached for comment. Nasdaq has said previously that it is willing to cover certain losses on the first day of trading.

After being offered at \$38 a share in May, Facebook shares closed Thursday at \$21.95 in Nasdaq trading.

Joe Lockhart To Leave Facebook To Consult

Politico

By Mike Allen and Elizabeth Wasserman

October 5th, 2012

<http://www.politico.com/news/stories/1012/82067.html?hp=r3>

Joe Lockhart is changing his status update at Facebook: He's leaving the social network to head back East to consulting.

The former White House press secretary under Bill Clinton has served as Facebook's vice president of global communications for nearly 15 months in Silicon Valley, but he will soon depart the company but likely continue to do consulting work for Facebook, a friend told POLITICO

"Joe ultimately came to the decision that he didn't want to leave the East Coast, and obviously we understand that decision. ... His roots on the East Coast are very deep," a Facebook official said.

Lockhart's departure date has not yet been confirmed. Lockhart's departure was first reported by AllThingsD.

Lockhart recently attended both the Republican and Democratic Party conventions on behalf of Facebook.

He was hired at Facebook in July 2011, as the company was battling issues in Washington concerning its protection of consumer privacy online and preparing to go public. The company's IPO in May was rocky and share prices have dropped up to 40 percent off the opening price of \$38 per share.

Lockhart is most well-known for building the press office during the second Clinton term in the White House. After the administration ended, Lockhart went on to become one of the founding members of

the Glover Park Group, a D.C.-based consultancy firm which has worked on campaigns for Microsoft, Verizon and Pfizer.

The decision to leave Facebook comes as Lockhart is hesitant about spending more time at the company's headquarters in California, sources told POLITICO.

Lockhart had remained in Washington, with frequent trips to Facebook headquarters in Menlo Park, Calif.

Zynga Is In Trouble: And That's Great For Facebook

CNBC

By Julia Boorstin

October 5th, 2012

<http://www.cnbc.com/id/49300267>

Zynga is in trouble, and that's not great for Facebook, which can thank Zynga for 14 percent of its revenue in the first six months of 2012.

Getty Images

Zynga stock [ZNGA 2.815] is plummeting to new lows on news that its core social games are underperforming, which means dismal results in the second half of the year. This is yet another nail in social gaming's coffin — it follows a number of executive departures and disappointing second-quarter results that have brought the stock down.

After the bell Thursday the social game maker lowered its outlook and announced preliminary third-quarter results, to soften the blow of the earnings announcement scheduled on Oct. 24.

Zynga lowered its projections for the second half of 2012, cutting its estimated bookings by about \$100 million, to a range of \$1.09 billion to \$1.1 billion, down from a \$1.15 billion to \$1.23 billion range. The company said it expects to report a net loss between \$90 million and \$105 million on revenue in the \$300 to \$305 million range. It is also taking a serious write-off on its acquisition of "Draw Something" maker OMG Pop, taking an \$85 to \$95 million impairment charge.

This is already hitting Facebook's stock [FB 21.9475], and a handful of analysts have issued reports on Facebook warning about the impact. (Read More: Will Facebook's New Focus on Revenue Boost Its Stock?)

JPMorgan lowered estimates for Facebook's payments revenue, now expecting it to decline 28 percent. JPMorgan warned that Zynga accounted for about 54 percent of Facebook's payments in the second quarter — about 9 percent of Facebook's total revenue. Barclays lowered its payments estimates for Facebook, noting that "social gaming on mobile devices is growing at the expense of desktop, which is where FB derives the majority of its payments revenue." (Read More: Facebook Hits Milestone, but Real News Is in Mobile.)

What happened? Games that were once Zynga's bread and butter — such as "FarmVille" (Zynga calls them the "invest and express" category) are performing worse than expected. Why? With the proliferation of mobile games, and people spending more time on smartphones, social games have lost their luster. Even if people are playing social games, Zynga has failed to convince more people to pay to play — paying gamers represent less than 5 percent of Zynga's user base.

Zynga CEO Mark Pincus posted some color on the company's blog about why the company issued preliminary results and lowered its outlook. He stressed that the company is investing in other genres — like gambling games, where it has the hit "Zynga Poker." He announced some new metrics, saying each of the company's three new games has achieved top 10 status, with more than 6 million daily players. Within its first five weeks, "ChefVille" has become a mainstay for 45 million monthly players, and "FarmVille 2" became the most popular social game within three days of network launch.

But the problems will add up to a weak fourth quarter. Pincus writes in his blog: "The reduced performance of some of our live web games is continuing to impact results and we have several new games which are at risk of launching later than expected." It also sounds like Pincus is getting ready to do some layoffs, saying, "We're addressing these near-term challenges by targeted cost reductions and focusing our new game pipeline to reflect our strategic priorities."

Zynga sees its future in mobile. More from the blog: "At the same time, we are continuing to invest in our mobile business where we have one of the strongest positions in the industry. These actions support our strategy to transition from being a first-party web game developer to a multi-platform game network."

He added: "Let's not lose sight of the bigger picture. The world is playing games, and is increasingly choosing social games. Zynga has become synonymous with social gaming, serving 311 million monthly active users — the largest player network on web and mobile. When we offer our players highly engaging content they respond. 'FarmVille 2' has been our most successful launch since 'CastleVille.' Our 'With Friends' franchise is defining social play on mobile where Zynga represents 3 of the top 5 most popular mobile games in terms of time spent in the U.S. according to Nielsen. While we're encouraged by our strong starting position on mobile, developing this new growth market to the scale of our web business will take time."

Why The Ad Tech Guys Are Going Nuts About Facebook Exchange, And Why That Matters

All Things Digital

By Peter Kafka

October 5th, 2012

<http://allthingsd.com/20121005/why-the-ad-tech-guys-are-going-nuts-about-facebook-exchange-and-why-that-matters/>

This summer, Facebook launched its own ad exchange. If you're in the ad tech world, that's a really big deal.

And the rest of you have probably never heard of it. That's in part because Facebook itself hasn't said much about it. It kept its partners under a tight gag order throughout the summer until last month, when it allowed them to hand out a few upbeat anecdotes. And none of that stuff will make sense to a regular human being.

So we asked Triggitt CEO Zach Coelius to try to explain what Facebook is up to, using as much plain English as possible.

Coelius isn't close to being a neutral observer, because he's been an enthusiastic Facebook partner. But he's a good explainer, and relatively candid.

One scenario to keep in mind as you read the interview: If Coelius is right, and the Exchange adds dramatic value to the cheap ads Facebook is using it for right now, what would happen if the company relented and offered the Exchange on all of its ads?

Two theories, which aren't mutually exclusive:

Facebook's overall revenue shoots up, as the company conforms to the way most of the Web ad world does business.

Facebook's value flattens or drops, because Facebook will have conceded that it hasn't been able to figure out a revolutionary new way to sell ads. Instead, it's just like any other big Web publisher with lots of inventory. Like, say, Yahoo or AOL. That doesn't mean it's a bad business, but it's a whole lot less exciting than a world-changing one.

Kafka: Let's go over the basics of ad retargeting, and how Facebook's exchange uses that technique.

Coelius: Retargeting lets advertisers utilize data they have about their customers. When I go to Backcountry.com and I look at a pair of skis, in the same way that Backcountry.com might send me an email saying "Hey, you know these skis are on sale, you should buy them," or the way that they would change their site to show me the skis that I looked at the last time, when I visit again — they can also do the same thing with their ads. So that, when they show you their ads, they can show ads about things that you're interested in. So, on Facebook, they're now enabling those advertisers to do that, too.

So you're buying the ads from Facebook and reselling them to your advertisers?

Coelius: We work with the exchanges, and they use a technology called real-time bidding, which means that in real time, as the page is loading, the exchange will call to us and say, "Hey, Triggitt, this user ID [which represents an anonymous Web surfer] is available, are you interested in showing them an ad?" And we say, "Oh, yeah, this guy wants to buy a pair of skis from Backcountry — we think he does, he looked at a pair of skis recently — let's show him a Backcountry ad with a pair of skis in it."

And how do the Facebook exchange ads perform against those you buy on other exchanges, like Google's?

We kind of went into this in the beginning saying, "Facebook's huge, and they're opening up to data-driven advertising, and if it performs just as well as everything else we do, we're going to be very happy." And, for us, it has been an amazing and wonderful surprise — the performance has been so much better than anything else we've ever done.

Why?

There's a number of reasons for that. The ad units actually are very good — they're always "in view," there's no fraud ...

These are the small “marketplace” ads you see on the right side of the page, right?

At this point. Those ads are small, but they’re actually good ads, relative to some of the other ads we’ve bought.

Really? Because some buyers I’ve talked to have complained that those small ads don’t give them enough room to do anything compelling.

The ad units are smaller than some of the others that we have, and if they were bigger they would work better. But they’re definitely not limited, and they’re not working poorly. They’re working incredibly well. I could only imagine what we could do if they gave us a bigger canvas to paint on.

Why else do you think the Facebook ads work?

On most of the other exchanges that we buy, the traffic patterns and the usage of those Web sites is either often search-driven traffic or browsing traffic. Traffic where the user is looking to do something, or looking to find something, or read about something. Facebook is a communication utility; it’s something that people always have open, and they’re there. And what we’re finding is that when they do engage with the ads, they’re converting at much higher rates. If they stop what they’re doing on Facebook and turn and click on an ad, and go to our customer’s Web sites — they buy.

Really? Because that’s the standard advertising critique of Facebook — that people aren’t there to buy anything. They’re there because they want to hang out with their friends, and they don’t want to see ads, and they don’t respond to them.

We never bought on Facebook before they opened up to real-time bidding, so we can’t speak to what went on before. But what we’ve always seen is that when you provide users with ads around the things that they’re interested in, they engage with those ads.

But, to beat this into the ground: The whole premise of your industry is that Web sites don’t matter, people do. That you can find interested customers for your clients all across the Web, and that the data about those people is more important than what site they’re on.

I don’t always say it’s one or the other. I would say the site, at least in this case, with Facebook, definitely matters. But being able to know what a user is interested in, and show them ads around that, definitely makes them better and more relevant.

So, how big can the exchange and retargeting get for Facebook?

Obviously Facebook is gigantic — 25 to 35 percent of the entire Web. So they’re big. The volume at this point is ramping incredibly quickly. We haven’t gotten to the full scale that is Facebook, but the dial is turning very quickly, and Q4 is coming up. And I would be very surprised if we don’t go to full scale in relatively short order.

Do you think they’ll end up allowing retargeting on all their ads?

I have no idea. They have grand plans, and they're going to do grand things. I hope they open this up more broadly. There's no reason why they can't apply the data to sponsored stories or premium ads or mobile — we could apply it across the board.

Facebook Is Not 'Liking' Pages For You

Los Angeles Times

By Salvador Rodriguez

October 4th, 2012

<http://www.latimes.com/business/technology/la-fi-tn-facebook-glitch-20121004,0,626711.story>

Facebook is fixing a glitch with its social plugins, but contrary to a report going around the Web, Facebook is not "liking" pages for you.

The glitch was discovered and shared on Hacker News this week. The site found that if you share a Web page on Facebook that has a "like" or "recommend" button, the page gets credit for two likes. Many commercial and individual sites now use those button to help boost their popularity.

But the count, in that case, should go up by only one.

News of the glitch led Gizmodo to post an article titled "Facebook Is Reading Your Messages and Liking Things For You." The article said that private messages sharing URLs for Facebook Pages -- such as the ones used on the social network to promote a movie or a celebrity -- causes Facebook to "like" that page in the name of you and your friend.

Fortunately, that's not true.

Picture Gallery: Fresh Facebook Features

A spokesman for Facebook told The Times that the social network will not like a Facebook Page for you just because you send someone its URL.

So you can feel safe sending someone a link to Justin Bieber's Page without fearing Facebook will like it for you -- which would, of course, be quite embarrassing.

In the meantime, Facebook is fixing the glitch, the spokesman said.

Facebook: 1 Billion Users- And Doubters

MarketWatch

October 4th, 2012

http://articles.marketwatch.com/2012-10-04/commentary/34250004_1_mark-zuckerberg-facebook-user-marketwatch

NEW YORK (MarketWatch) — Mark Zuckerberg, chief executive officer of Facebook, is trumpeting that his social-media company has passed the 1 billion milestone in users.

Big deal.

Facebook's stock, which has greatly disappointed investors since its debut, only rose by a few pennies on Thursday morning following the news of the 1-billion mark.

The investment community isn't so easily impressed by big numbers. It recognizes that no matter how many users join Facebook (US:FB), Zuckerberg remains under pressure to show that his company can monetize all of those loyalists, especially, by capitalizing on the global societal shift to using mobile devices.

Of course, Zuckerberg will take good news anywhere he can get it. He is trying to improve on his questionable media strategy of keeping a low profile even as the price of his company's stock nosedived. The shares which began trading on May 18, are trading about 42% below their \$38 initial public offering price. Even as his shareholders suffered, he didn't attempt to make public proclamations to reassure them.

Zuckerberg is clearly trying to prop up his image and take a more public stance. The 28-year-old Zuckerberg went on NBC's (US:CMCSA) "Today" show on Thursday morning and tried to inject some fresh hope into the gloomy Facebook picture. "We're in a tough cycle now and that doesn't help morale, but people are focused on what they're building."

While Facebook does have many supporters among investment firms' ranks of analysts, they are often drowned out by the pessimists. Barron's recently shook up Wall Street by publishing a front-page piece proclaiming that Facebook's stock was worth \$15. Further, MarketWatch columnist Mark Hulbert took an even harder line, writing that it's merely a \$13.80 stock. (Barron's and MarketWatch are owned by News Corp.)

Sure, it makes good media copy for Zuckerberg to tell the world that he now boasts 1 billion "friends." But there it still must seem as if for every Facebook user, there are just about as many doubters that the company can conquer Wall Street.

Facebook Scans Private Conversations To Pad Likes
E-Commerce Times
By Peter Suci
October 5th, 2012

<http://www.ecommercetimes.com/story/Facebook-Scans-Private-Conversations-to-Pad-Likes-76320.html>

It isn't too hard to see what Facebook users Like, but on Thursday reports surfaced online about something few if any users would find likeable. It appears that sending links via private messages through the social network results in extra Likes for the link targets -- never mind that the link you're sharing may concern something you abhor. Call it a case of Like fraud.

This is all the more worrisome to users because Facebook is culling links from seemingly private messages and converting them into very public Likes. This raises the question of whether private information could be made public, but Facebook denies that possibility.

"Absolutely no private information has been exposed. Each time a person shares a URL to Facebook, including through messages, the number of shares displayed on the social plugin for that website increases," said Facebook spokesperson Devon Corvasce.

"Our systems parse the URL being shared in order to render the appropriate preview, and to also ensure that the message is not spam. These counts do not affect the privacy settings of content, and URLs shared through private messages are not attributed publicly with user profiles," she told the E-Commerce Times.

"We did recently find a bug with our social plugins where at times the count for the share or Like goes up by two, and we are working on fix to solve the issue now," she added. "To be clear, this only affects social plugins off of Facebook and is not related to Facebook page Likes. This bug does not impact the user experience with messages or what appears on their timelines."

Latest Faceplant

The issue of privacy on Facebook has come up before, and this latest debacle is one that could make users question what they do through the social network.

"They're not helping themselves when they tell users that they will safeguard privacy and take privacy seriously and then seem to contradict those claims with this kind of behavior," said Greg Sterling, principal analyst of Sterling Market Research. "Assuming the reports are correct, Facebook appears to be data mining activities that users clearly intend to [keep] private. This is another privacy misstep for Facebook, and they'll be forced to discontinue the practice."

Still, it's questionable whether Facebook actually did anything wrong if it didn't share information, as it maintains, but merely added Likes for sites that users seemed to be talking about. It isn't as though the Likes were tied back to an individual or specific Facebook account. Is this something Facebook is -- or should be -- allowed to do?

"While I believe that Facebook's policy is intrusive and distasteful, it seems to be within the bounds of company policies," said Charles King, principal analyst for Pund-IT. "As I understand it, any material Facebook users post on the site, including personal photos, comments, etc., become, by policy, the property of Facebook."

"The company likely considers the rifling of users' private conversations and assigning Likes as it sees fit to simply be a matter of efficiently leveraging its assets," King told the E-Commerce Times.

"Plus, the practice also reflects Facebook CEO Mark Zuckerberg's stated belief -- after controversies surfaced about the company's privacy policy changes in 2010 -- that users' participation in an open environment like Facebook means that they prefer their data to be public," he noted.

Losing Face

Whether the fallout from this turn of events, which is just the latest in a string of privacy-related concerns, will have people turning away from Facebook is yet to be seen.

"This is really an abuse of our trust," said Alan Wlasuk, managing partner of software development firm WDDInc.

"Is Facebook going to be a responsible parent with our data?" he wondered. "What are they doing with our data that we expect that they will protect?"

This could show that Facebook isn't as much a community of users as it is a horde of users unwittingly contributing to the goal of making the owners money.

"This latest practice is simply a brutal reminder that Facebook's customers are not users -- but rather the businesses that buy the company's advertising services," emphasized King.

It could be scenarios such as this one that make users examine alternatives, including the recently designed MySpace.

"It is a fickle user group out there, and if they lose enough user confidence, it will open the door for someone else to come in," Wlasuk told the E-Commerce Times. "That could be MySpace or a new startup. But this certainly opens the door."

IPOs Shake Off The Facebook Funk

USA TODAY

By Matt Krantz

October 4th, 2012

<http://www.usatoday.com/story/money/markets/2012/10/04/ipos-facebook-stocks-debacle/1613667/>

The IPO market's black eye from the Facebook debacle is finally starting to fade.

Next week, nine initial public offerings are slated to start trading, making it potentially the busiest week for deals all year, says Greg Leffert, analyst at Renaissance Capital. And that's coming off the busiest week for IPOs in more than two months. There have been 104 IPOs this year, which is running 3% ahead of last year.

"The market has come alive with the sound of IPOs," says John Fitzgibbon of IPOscoop.com

Seeing the IPOs come back to life is a relief to market watchers, who saw the market shrivel up after the hyped and ultimately disappointing IPO in May of the largest social-networking company.

Not a single company had a successful IPO for 35 days following the Facebook offering, Leffert says.

But now, IPO investors are being lured in with:

-- Offerings from a range of industries. The week's deals hail from a mix of businesses ranging from biotech Regulus Therapeutics, which went public Thursday, to container maker Berry Plastics and identity protector LifeLock. "It's all over the place," says Francis Gaskins of IPO Desktop Premium.

-- Stronger IPO performance. After Facebook's bravado at boosting its price range and increasing the size of its offering, companies have been more timid and conservative. The results have been better after-IPO returns. The FTSE Renaissance US IPO index, a gauge of the performance of recent IPOs, is up 6.3% over the past four weeks. That tops the 3.9% gain by the S&P 500 during that same period. And just two of the 27 IPOs during the third quarter are down from their IPO prices, Leffert says.

-- Less volatility in broad market. A steadily rising stock market is the best friend to IPOs, Fitzgibbon says. And that's what's been powering the recent recovery even though the market bottomed this year in early June.

Investors, though, need to be choosy as there are still misfires. LifeLock Thursday fell an additional 2% to \$8.19. It's down nearly 10% from its \$10-a-share offering price. And late Thursday, restaurant Dave & Buster's canceled its IPO. Next week, there are several biotechs, including Kythera and Intercept, but deals in that sector have been mixed, Gaskins says.

The good news is that IPO investors are finally forgetting about Facebook. "Facebook is history at this point," Gaskins says.

Facebook Shuttters The Cool Hunter For Copyright Issues

CNet

By Dara Kerr

October 4th, 2012

http://news.cnet.com/8301-1023_3-57526539-93/facebook-shuttters-the-cool-hunter-for-copyright-issues/

Facebook has cracked the whip on The Cool Hunter. After little warning the social network shuttered the design and pop-culture Web site's Facebook page eight weeks ago, leaving both the founder and its 788,000 fans wondering what went wrong.

In a blog post this week, founder Bill Tikos bemoaned the shutdown and said that it has severely hurt the site's business. According to Tikos, its Facebook fan base grew by 1,500 to 2,500 per day and also generated more than 10,000 click-throughs to the site per day. Overall, The Cool Hunter has 2.1 million monthly site visits, along with hundreds of thousands of Twitter and Instagram followers.

Here's more from Tikos:

Our Facebook presence has been a unique and extremely important part of our strategy. It is the water cooler of our global community. Losing our FB page is not just a minor hick-up. It is a serious loss of connection and interaction, and of a massive amount of content.

We post items on FB that may not make it to the actual blog, giving hundreds of artists and designers exposure, and thousands of fans something new to see. Our FB page provides the interaction, comments and ideas that help us keep our editorial fresh. It helps us generate ideas for our weekend playlists, gives us tips for our world tours on what to do and see in each city. Most important, our FB community keeps us on our toes, generates great ideas and feedback, and lets us know when we are on the right track.

In the blog post, Tikos openly questioned why Facebook decided to shutter its account. According to The Next Web, the social network disabled The Cool Hunter's page because of "repeat copyright infringement."

Tikos wrote that he had no idea what his company was infringing upon and that it never "intentionally" broke any Facebook rules, but he did admit that there were two images that possibly could have qualified under copyright infringement. He also said there may have been times when appropriate image credit wasn't given because the company couldn't "find that information."

Facebook's terms of service explicitly state that users cannot "post content or take any action on Facebook that infringes or violates someone else's rights or otherwise violates the law."

Tikos desperately wants its Facebook account reinstated and he said he will do whatever necessary to make that happen. But, according to The Next Web, the social network isn't budging. A spokesperson told the news source that the disabling of The Cool Hunter's account was a "permanent removal." CNET contacted Facebook for comment. We'll update the story when we get more information.

General Tech

Twitter: Victim Of Own Success?

Politico

By Jonathan Allen

October 4th, 2012

<http://www.politico.com/news/stories/1012/82052.html?hp=t1>

Twitter is so two seconds ago.

The hot social network has become so huge that it chalked up 10.3 million debate-related tweets in 90 minutes Wednesday night. That's 1,907 TPS, or tweets per second — faster than the human eye can read.

All that noise had some of Twitter's biggest users complaining or even hopping off for the show, leaving a sour taste in some mouths on a banner night for the company. And Twitter knows it.

If the experience changes permanently — from a lively conversation to a yelling match — Twitter could lose some of its cachet with the smart set.

But, so far the sentiment is more frustration with a favorite tool rather than a desire to find a new one.

Company officials say their biggest product-development challenge is reducing the "signal to noise ratio" for users. That means making sure users get what they want from the Twitterverse without being overloaded with junk Tweets.

"We continue to experiment with how to surface the most relevant tweets to users during large events like the debates," said Twitter spokeswoman Rachael Horwitz. She noted that the overload issue isn't much of a problem for average users, who "weren't quite as overwhelmed and they probably really enjoyed seeing what folks ... had to say in real time."

They've also been experimenting with events pages, which were used for NASCAR races, the London Olympics, the political conventions and last night's presidential debate. The algorithms are complex, but the concept is simple. Twitter picks a list of relevant users on a topic — say, political journalists, commentators and campaign officials for a debate — and populates the page with Tweets from their accounts. The system is set up to start capturing popular themes that arise spontaneously during the debate from accounts that weren't originally on the list. It's in this way that Twitter hopes to provide a better experience for users who want to follow a major national or world event without having to sort through their feeds for relevant insights.

Indeed, many Twitter users seemed to enjoy all the talk about the debate, and some tweeted that they watched their feeds rather than the television to keep up with what the candidates, the surrogates and their own friends had to say about each zinger and facial expression. While the political class fretted about the overload, the typical user doesn't follow everyone who has ever run for office, written a national political story or worked on a campaign.

"#debate boring. Listening to debate while reading Twitter feed awesome," wrote @andymatkovich, who follows 224 people.

Twitter uses big events like the presidential debate to expand its network, allowing folks to see tweets without having already registered with the site, as @realstrangerec pointed out in signing up on Wednesday night. "Joining #twitter because the tweets on the #debate! Awesome stuff!!" he wrote.

The service is starting to supplant the post-debate spin room as a gauge of how the candidates are doing. Tweets from liberals criticizing moderator Jim Lehrer's performance were a sure sign that their guy, President Barack Obama, wasn't winning the night. Mitt Romney, on the other hand, got early kudos from Republicans and many political analysts. It was possible for just about anyone — even #BigBird — to watch the ebb and flow of the event just by keeping an eye on their Twitter feed. For some users, it got to be too much.

"I just added the #debate feed and it's moving WAY too fast for me," @sammydavis22 tweeted Wednesday night. "Oh dear."

Ditto for @drgriest: "My twitter feed is almost too fast for me to follow, already, 45 minutes before the debate. This is going to make my head hurt."

That kind of talk crops up from time to time, says Lance Ulanoff of the social media news site Mashable.

"This feeling of Twitter not being up to the task occasionally happens during these high-impact events. It's frustrating and high-profile users will often vent their frustration," he said. "Still, most Twitter users are neither advanced nor high-profile and probably don't even notice the slowdown. The advanced users notice and complain, but are too devoted to the platform to leave."

Plus, it could be worse. Twitter reports that 40 percent of its 140 million members never Tweet at all.

Google Says Motorola Cuts Will Cost More Than Expected
The New York Times
By Claire Cain Miller

October 4th, 2012

<http://bits.blogs.nytimes.com/2012/10/04/google-says-motorola-cuts-will-cost-more-than-expected/>

Google will cut deeper and spend more money on cuts than it originally expected as it restructures Motorola Mobility, the ailing cellphone maker it bought for \$12.5 billion.

Google will spend \$300 million on severance and other charges related to layoffs, the company said in a filing with the Securities and Exchange Commission on Thursday, an increase of \$25 million from the \$275 million that Google originally said layoffs would cost. But it does not plan to lay off more people than the 4,000 employees it originally announced.

It will also spend \$90 million closing offices and factories and leaving certain markets, the company said, and plans to leave more areas outside the United States than it originally said it would. In August, it said it would close about one-third of its 94 offices worldwide, focusing on cuts in Asia and India.

The company did not provide more details beyond the government filing. In a statement, Google said, "This filing was made to provide updated information around Motorola Mobility's cost reductions that were announced earlier this summer."

In August, Google announced the layoffs and cuts as part of its broader plan to turn around Motorola Mobility, which has been unprofitable for 14 of the last 16 quarters. In addition to using Motorola's patents to defend Google's Android mobile operating system, the company said it planned to focus on just a few smartphones instead of dozens, stop making low-end devices and make its phones more cutting-edge with innovations like longer battery life and artificial intelligence.

The \$300 million charge and \$40 million of the \$90 million charge would affect Google's third-quarter earnings this year, the company said in the filing.

Samsung Expected To Reach End Of Record Run

Reuters

October 5th, 2012

<http://www.nytimes.com/2012/10/06/technology/samsung-expected-to-reach-end-of-record-run.html>

SEOUL — Samsung Electronics reported a record quarterly profit of 8.1 trillion South Korean won, nearly double the figure of last year, as strong sales of high-end televisions and Galaxy smartphones more than offset reduced orders for chips and screens from Apple, its main rival and leading customer.

Most analysts, however, expect a run of four record quarters — the most recent worth \$7.3 billion — to end in December, as the South Korean group, one of the world's leading makers of smartphones, televisions and memory chips, increases its marketing, countering the new Apple iPhone 5 and other products in a crowded smartphone market, valued at \$200 billion globally.

Credit Suisse Group, an international financial services company, estimated that Samsung might have spent about \$2.7 billion on marketing in July to September alone during the Olympic Games in London and on Galaxy promotions.

The expected record profit of 28 trillion won would mean higher payouts for performance to many of Samsung's 206,000 staff members early next year. And Samsung may have to set money aside this quarter if it fails to overturn an appeal of a U.S. court verdict that awarded more than \$1 billion in damages to Apple on Aug. 24 for patent infringements by Samsung.

"Fourth-quarter profit will be pressured by one-off expenses: performance payouts and some \$1 billion in legal provisioning relating to the Apple litigation," said Lee Sun-tae, an analyst at NH Investment & Securities.

"Excluding those, core earnings will remain solid, and a swing factor is how much Samsung spends on marketing."

Analysts expect earnings to decline until the second quarter of next year as a slump in computer sales and a weak global economy sap demand for chips and electronics products.

"The biggest risk for Samsung is competitive product lineups from its rivals, such as the iPhone 5," said Byun Han-joon, an analyst at KB Investment & Securities.

"Because handsets drive most of its profits, one misstep in handsets could result in losses for the whole Samsung group," Mr. Byun said.

Profit at Samsung's mobile division is likely to have more than doubled in the July-to-September period to about 5 trillion won as smartphone shipments topped 58 million, including as many as 20 million of the Galaxy S III.

Ahead of full quarterly results due Oct. 26, Samsung estimated that its July to September operating profit jumped to 8.1 trillion won from a year ago, beating an average forecast of 7.6 trillion won in a survey of analysts.

Strong handset sales made up for reduced profits from its chip business. Prices of dynamic random access memory, or DRAM, chips — used in computers and mobile phones — dropped 14 percent in the September quarter. Such chips now trade below what it costs most contract manufacturers to make them and will squeeze near-term earnings, analysts say. Tablets and smartphones, the real growth areas, use far smaller memory storage.

Samsung is expected to invest less in chips next year because of the drop in demand, which could be bad news for equipment manufacturers. Kwon Oh-hyun, who became chief executive of Samsung in June, said late last month that the group had yet to complete its 2013 investment plans.

Samsung is strengthening its product lineup, with its latest phone-tablet, the Galaxy Note, expected to go on sale in the United States this month; its ATIV smartphones, which run on Microsoft's new Windows system, will compete with Nokia's Lumia series.

Fake Antivirus Ringleader Must Pay \$163 Million
Information Week
By Matthew Schwartz
October 3rd, 2012

<http://www.informationweek.com/security/vulnerabilities/fake-antivirus-ringleader-must-pay-163-m/240008388>

Acting on a Federal Trade Commission complaint, a federal court has imposed a \$163 million judgment on a woman who allegedly helped run a scareware ring that tricked over one million consumers across six countries into purchasing fake security software.

That decision, announced by the FTC Tuesday, came after a two-day bench trial last month. U.S. District Judge Richard D. Bennett, who presided over the case, also wrote in his related judgment that the defendant, Kristy Ross, "shall be permanently restrained and enjoined from the marketing and sale of computer security software and software that interferes with consumers' computer use as well as from engaging in any form of deceptive marketing."

The fake software in question--often referred to as scareware, fake antivirus, or fake AV--is part a social-engineering scam designed to trick users into thinking their PC contains viruses, system errors, spyware, or pornography. The software then advertises information security software to help, which is available for immediate download. But in reality, the results of the system scan, as well as security software's cleaning power, is fake.

[Cyber crooks' use of server-side infrastructure used to infect PCs is increasing. Read more at Online Criminals' Best Friends: Malnets.]

According to the FTC, Kristy Ross, together with defendants Sam Jain, Daniel Sundin, Marc D'Souza, and James Reno, served as officers and directors of two businesses: Belize-based Innovative Marketing, Inc. (IMI), and a subsidiary, Cincinnati-based ByteHosting Internet Services. The businesses were used "to conduct a massive 'scareware' scheme that marketed a variety of computer security software via deceptive advertising."

According to the FTC, the operation "used elaborate and technologically sophisticated Internet advertisements placed with advertising networks and many popular commercial websites," which purported to display the results of a "'system scan' that invariably detected a host of malicious or otherwise dangerous files and programs on consumers' computers." The scanner then urged consumers to buy software, priced between \$40 and \$60, to remediate the issue.

In the wake of the FTC's complaint, which accused eight defendants in total of having violated the FTC Act, the U.S. District Court for the District of Maryland immediately granted the FTC a temporary restraining order requiring IMI to cease marketing and selling its software, which was sold under such names as WinFixer, WinAntivirus, DriveCleaner, ErrorSafe, and XP Antivirus. The court also froze the assets of the businesses involved.

Last month, Ross argued in court that the judgment of \$163 million proposed by the FTC against her "was grossly overinflated and that she should be held liable only for the ads and products she herself marketed at MyGeek," wrote Bennett in his judgment. But the judge said that he found the amount, which had been calculated by the FTC, was "a reasonable approximation of consumer redress." Bennett also ruled that Ross would be jointly liable for the "consumer redress" amount with defendants Sam Jain, Daniel Sundin, and IMI.

Of all of the people charged by the FTC in this case, Ross was the only remaining defendant. Four of the others already settled with the agency, including Marc D'Souza and his father, Maurice D'Souza, who in 2011 agreed to a settlement requiring that they return \$8.2 million in what the FTC dubbed as "ill-gotten gains." The other three defendants in the case, meanwhile, had judgments entered against them by default because they failed to appear in court and participate in the litigation.

Miscellaneous

Apple Posts A Video Remembering Steve Jobs And Highlighting His Greatest Achievements

TechCrunch

By Darrell Etherington

October 5th, 2012

<http://techcrunch.com/2012/10/05/apple-posts-a-video-remember-steve-jobs-and-highlighting-his-greatest-achievements/>

Apple has posted a video on its homepage today, with footage of Steve Jobs over the years speaking at keynotes and Apple events, showing images of him and the products he created that changed the way we think about and use computers and mobile devices. The video begins with the famous Wayne Gretzky quote that pretty much defines Jobs' career: "I skate to where the puck is going to be, not where it has been."

Steve Jobs passed away October 5, 2011, after a battle with pancreatic cancer. His life was maybe the ultimate comeback story, having founded Apple in 1976, only to be pushed out in 1985, and then to return to the company when it was in serious trouble in 1997 to lead it to where it is today.

A message from Apple CEO Tim Cook follows the video, marking the occasion and discussing Steve and what he's meant, and will continue to mean for the company. Here's the letter in full:

A message from Tim Cook, Apple's CEO

Steve's passing one year ago today was a sad and difficult time for all of us. I hope that today everyone will reflect on his extraordinary life and the many ways he made the world a better place.

One of the greatest gifts Steve gave to the world is Apple. No company has ever inspired such creativity or set such high standards for itself. Our values originated from Steve and his spirit will forever be the foundation of Apple. We share the great privilege and responsibility of carrying his legacy into the future.

I'm incredibly proud of the work we are doing, delivering products that our customers love and dreaming up new ones that will delight them down the road. It's a wonderful tribute to Steve's memory and everything he stood for.

EXHIBIT 28

UNSEALED VERSION OF DOCUMENT PURSUANT TO THE NOVEMBER 1, 2018 ORDER

Facebook Daily News – Monday Afternoon

October 1, 2012

Full Text Articles

Must Read

Facebook Lays Out All Of Its New Targeting Techniques In One Easy-To-Read Blog Post

Forbes

Kashmir Hill

October 1, 2012

<http://www.forbes.com/sites/kashmirhill/2012/10/01/facebook-lays-out-all-of-its-new-targeting-techniques-in-one-easy-to-read-blog-post/>

In the last few months, Facebook has made significant changes to the way advertising works on its site. As some predicted, Facebook's going public and needing to drum up more revenue has resulted in the company dipping its hands deeper into users' data to monetize it. More than that, those hands are starting to pull in data from outside of the Facebook kingdom. Privacy engineer Joey Tyson lays out the three big "innovations" in Facebook advertising from the last few months in a Facebook blog post, and argues that the company "carefully designed our versions of the features with your privacy in mind."

Here's what's changed:

1. Advertisers aren't just targeting 'your type anymore.' They're actually targeting you.

It used to be that advertisers tried to reach a particular audience, i.e., "25-year-old men that like sports cars and Little Ponies." But now advertisers are finding ways to target specific people, i.e. the guy they know has the email address "lamaBrony@gmail.com." Thanks to "Custom Audiences," if a marketer knows your email address or phone number, they can tell Facebook to specifically target you with an ad. Tyson writes:

"For example, a shoe store might want to show a special offer to people who have already bought shoes from them. The store can provide us with "hashes" of their customers' email addresses so that we can show those same people the ad without the store having to send us the actual email addresses. These hashes are bits of text that uniquely identify a piece of data (such as an email address) but are designed to protect against reverse engineering which would reveal that data. Since Facebook and the store use the same method to create each hash, we can compare the store's hashes to hashes of addresses in our records and show the ad to any group of users that match. If a hash from the store does not match any of ours, we discard it without ever discovering the corresponding email address and without storing any information that we did not have before. And once we no longer need the hashes that do match, we delete them too."

Facebook is not the only tech company making it easier to target specific people with ads. This summer, ProPublica detailed how Microsoft and Yahoo are now allowing advertisers to target specific people with ads if they know their email addresses. That means ads are starting to become like direct mail, except those who see the ads don't realize it, because their address isn't on the front of the digital envelope.

2. Advertisers can now target people with Facebook ads based on their Web browsing and searching outside of Facebook.

"Facebook Exchange" lets advertisers target ads at customers who have visited their site. So if you looked at some scandalous lingerie on Sears.com, for example, you might start seeing ads for that lingerie the next time you're on Facebook, should Sears wish. Writes Tyson:

"Facebook Exchange (FBX) gives marketers an opportunity to bid on showing ads in real time. Approved third-party service providers work with Facebook and marketers to enable this process. We agree with a provider on an ID number (separate from your Facebook ID) for each visitor's browser. If someone then visits Facebook and his or her browser has that ID, we notify the service provider, who tells us when a marketer wants to show a particular ad. This allows marketers to show you ads relevant to your existing relationship with them – and without them needing to send us any personal information about you." Via [Relevant Ads That Protect Your Privacy](#).

By now, most of us are used to products that seem to follow us around the Web after we look at them once. Now the ads can trail us off-road into the Facebook forest. Users can opt out of this, but not through Facebook. They have to visit the opt-outs of the third party platforms (that they've never heard of before) that are doing the ad matching (TellApart, Triggitt, Turn, DataXu, MediaMath, AppNexus, TheTradeDesk, and AdRoll).

3. Facebook is tracking what users buy in stores so it can tell advertisers that their ads work.

Facebook has partnered with a Colorado-based company named Datalogix which has a vast database of what we buy thanks to its access to information from stores' loyalty card programs. Facebook can now tell advertisers that after seeing a specific ad, x% of users bought the product. Writes Tyson:

"Because of our commitment to privacy, we had an industry-leading auditing firm evaluate the privacy implications of this process. The auditor confirmed that, throughout this process, Datalogix is not allowed to learn more about you from Facebook profile information. Similarly, Datalogix does not send us any of their purchase data, meaning we cannot specifically tell whether or not you purchased a marketer's product. Finally, with this partnership, Datalogix only sends the marketer aggregate information about large groups of people. None of this data is attributable to an individual Facebook user."

Tyson ends the post by reminding users that "advertising helps keep Facebook free." Tyson, known on Twitter as TheHarmonyGuy, appears to be taking questions there about the post if you're interested.

If nothing else, I'm impressed that "privacy engineer" is a job title that exists now.

Facebook Related

CNBC EXCLUSIVE: CNBC Exclusive: CNBC Excerpts: Facebook Chief Operating Officer Sheryl Sandberg Speaks with Julia Boorstin Today on CNBC
CNBC.com
Jennifer Dauble
October 1, 2012

<http://www.cnn.com/id/49167392>

When: Today, Monday, Oct. 1, 2012

Where: CNBC's Business Day Programming

Following are excerpts from the unofficial transcript of a CNBC EXCLUSIVE interview with Facebook Chief Operating Officer Sheryl Sandberg. Sandberg sits down one-on-one with CNBC's Julia Boorstin for the first time since the Facebook IPO. Excerpts of the interview will run throughout CNBC's Business Day programming today beginning on "Squawk Box" (M-F, 6-9AM ET).

Following are links to videos of the interview:

<http://video.cnbc.com/gallery/?video=3000119190&play=1> and

<http://video.cnbc.com/gallery/?video=3000119449&play=1>.

All references must be sourced to CNBC.

SANDBERG ON THE IPO

SHERYL SANDBERG: As Mark said, we're obviously disappointed and really surprised by what happened in the IPO. This was certainly not how we planned it. The good news for us is that we're a really focused, product driven company. And so we're taking that energy and really focusing on proving to the world that we can continue to grow our business, continue to grow our users and their engagement, and build a great company, not just for a quarter, but hopefully for decades and decades.

JULIA BOORSTIN: But your IPO has been described as an utter debacle. Whose fault was it?

SHERYL SANDBERG: I'm gonna let others-- go ahead and answer those questions. And I know you have many people who are willing to come on and-- and talk about that. The focus for us is really on the things we can control and the future. We're looking forward to the business we're building, to providing great experiences for users, to the mobile transition and continuing to lead-- for mobile users. And importantly, to really increasing our focus on monetization.

JULIA BOORSTIN: What's happened since the IPO cannot be good for employee morale. What do you tell employees? What do you tell new recruits?

SHERYL SANDBERG: Obviously, employees are disappointed that the stock price has gone down. The good news for employees is that they get to come to Facebook every day and build great products for users. And most of our employees tend to be very mission focused. That doesn't mean the stock price doesn't matter. Because, of course, it does. But they're mission focused. They want to come and build products. If you want to build social products, there's nowhere that's better to work than Facebook and no bigger opportunity out there.

JULIA BOORSTIN: But you must be disappointed in the stock price.

SHERYL SANDBERG: We've said it a bunch of times. You know, as Mark said, we're both disappointed and surprised in the stock price. But we really have to focus moving forward on how we build a business.

JULIA BOORSTIN: A lot of people have come on CNBC's air saying that \$15 is a fair-- or somewhere in that ballpark is a fair price for Facebook stock. How do you respond to that?

SHERYL SANDBERG: Not gonna predict stock price movements. But what I do-- do believe is that we are more valuable company than we were four months ago the day we went public. If you look at

what we've done since we went public, we've invested more in monetization. And we're showing great products with great returns for advertisers.

SANDBERG ON IPO'S IMPACT ON BUSINESS

SHERYL SANDBERG: Already in the last couple months, you've seen us roll out products pretty aggressively. We've rolled out Facebook Exchange, custom audiences, new mobile ad formats, revamped our offers. And all of these do one thing, which is they help make ads more targeted, more useful, and more effective for marketers on Facebook.

JULIA BOORSTIN: And do you have any new ad products that you haven't announced yet?

SHERYL SANDBERG: Many. One of the things I think you can always expect from Facebook is continual iteration. We roll out products very quickly. We change our products very quickly. But we think that's really important to-- to continue to develop the products we need in the market.

JULIA BOORSTIN: Now Facebook's ad growth has been decelerating. What are you telling Wall Street?

SHERYL SANDBERG: Our growth is something we care a lot about. We believe we have the biggest opportunity-- to grow revenue ahead of us. We are the largest-- we are the largest community of engaged users anywhere on the-- anywhere in the world. Every day on Facebook, we have five Super Bowls, which means you can reach that many people. Increasingly, as advertisers are learning to work with the platform, they're learning and we're helping them learn what works and how they can use this to generate sales. But we think our results are very strong and that we believe we can prove to advertisers that not only do they get a good return on Facebook ads, but they get a better return on Facebook ads compared to most things they do.

JULIA BOORSTIN: So you think Facebook's business model has changed dramatically since the IPO?

SHERYL SANDBERG: The business model hasn't changed, we're increasing our focus on monetization. The cornerstone of our business is advertising. And in that advertising opportunity, you know, it's a \$600 billion business, where our results with our clients show that we return results, which are in many cases much better than the return they get anywhere else. That's a really unique opportunity. If you want to-- if you're a business and you want to connect with people, but you also want word of mouth to spread against your business, there's no better opportunity out there. And I think what we've done since the IPO is continue to really focus on building that business. And I think we're executing better and better.

SANDBERG ON FACEBOOK'S MOBILE PROBLEM

SHERYL SANDBERG: Mobile is obviously a huge strength for the company and a huge opportunity. We have a big mobile network, both in terms of our users, over 500 million. But also in terms of the other apps and sites that are enabled with Facebook. We have over 9 million across mobile and desktop in the world.

JULIA BOORSTIN: How can you compete with Google when it comes to an ad network?

SHERYL SANDBERG: Our results are very strong. People who are using Facebook to reach-- to reach customers are finding that because we have real people and real engagement, the results compare favorably with basically anything else they do. Even our targeting. So if you take a narrow targeting

for advertising, you know, women 18 to 28, the average online actual getting that right is about 35%. Our accuracy is 90%. So just there, that difference alone, is, you know, tremendously valuable in terms of making marketers get the bang for their buck that they need.

JULIA BOORSTIN: Has the new mobile app you launched in August boosted revenue?

SHERYL SANDBERG: The new mobile app is boosting engagement. And engagement always leads to revenue. We have the most engaged audience of mobile users anywhere. Importantly, our mobile users are more engaged than even our desktop users who are already the most engaged users anywhere in technology. If you're a mobile user, you're 20% more likely to come back to Facebook on a given day.

JULIA BOORSTIN: How do you balance the risk of overwhelming mobile users with ads and the-- the absolute need to start rolling out more mobile ads?

SHERYL SANDBERG: If ads are good and users like them, you really mitigate that risk. What we're doing is as we're rolling out ads into mobile, which we just rolled out this year, we're testing very carefully engagement on those ads, vis-à-vis engagement on other-- on other parts of the experience. And those tests are going very well. Importantly, we also see that our mobile ads are more engaging compared to the other ads we've had on the right-hand side. On average, a promoted pays post, if it goes through newsfeed, whether on desktop or mobile, is eight times more engaging than that exact same post on the right hand side. That's a big opportunity for us.

JULIA BOORSTIN: Wall Street also talks about Facebook as having a mobile problem. How else are you trying to make money from mobile?

SHERYL SANDBERG: Mobile's a huge opportunity for our company. It's also a platform shift and one we take very seriously. We are the number one-- mobile use-- usage in most every market on most every platform in the world. We're the number one free downloaded app on iOS and Android. A lot of companies have the problem that, you know, they don't know what to do with their ads in mobile. Because their ads are on the right-hand side on the desktop. And when you go to a mobile device and you cut off that right-hand side, you know, where does the ad go? Our most effective ads are now running through newsfeed. And that creates a very natural opportunity to have a native advertising experience on mobile. And it's something we've rolled out just this year, but is going really well.

SANDBERG ON NEW BUSINESS PLANS

SHERYL SANDBERG: As we increase our investment in monetization, we're thinking about premium services for businesses. We've heard from businesses, you know, all over the world that they want more from us. There are things they'd pay for they really want us to provide. So it's an area that we're currently starting to explore. We don't have a product announcement for you today, but it is something we're working on.

JULIA BOORSTIN: How big is the potential?

SHERYL SANDBERG: We think the potential on Facebook, you know, for almost anything is really big, because of our sheer size and scale and most importantly because of what users are doing and how engaged they are on the site.

JULIA BOORSTIN: So you have a lot of people's credit card numbers. Will we see a want button? Will we see more retail, more ecommerce?

SHERYL SANDBERG: We are working on lots of things. And I think you've saw last week-- the beginnings of-- of commerce on Facebook with our gift launch.

JULIA BOORSTIN: There's been a lot of talk about that want-- want button. Will we see one?

SHERYL SANDBERG: Well, right now, there is the ability to build all kinds of different open graph implementations. And there are people that are working on that.

JULIA BOORSTIN: Beyond advertising, Mark Zuckerberg has talked a lot about the potential in search. What's your plan for search?

SHERYL SANDBERG: So as Mark said, I think people are surprised by how much search is done on Facebook. You know, every day there's an enormous percentage of search. There's also been a promise in the market that search could become more social that we don't think has been met. You know, when you're looking for information, the question is who do you want it from? Do you want it from the wisdom of crowds or do you want it from the wisdom of friends? Our answer to the information that's most relevant for users is really about-- about friends. That if I'm looking for, you know, a restaurant to go to-- in New York this week, I'd rather get a recommendation from a friend. That's really what we're working on.

JULIA BOORSTIN: So could a Facebook social search compete with Google?

SHERYL SANDBERG: Not gonna comment on future product launches. We are working at making our products as usable and as accessible for everyone in the world.

SANDBERG ON SOCIAL AD SKEPTICISM

SHERYL SANDBERG: Facebook ads are incredibly effective. Not just at helping people remember ads and have brand affinity, which is really important on our platform, but more importantly at ringing the cash register. New platforms take a while to develop and they take a while to understand. So ours is a new platform. And I do think there's still skepticism out there. The good news is that with our clients and the people we're working with directly, they're increasingly convinced of the return we provide. In the last year, we've done over 60 studies looking at the impact Facebook ads have on ringing the cash register, either in online purchases or offline. And of those 60 studies, 70% showed a return on ad spend of three times or better and 49% showed a return on ad spends of five times or better.

JULIA BOORSTIN: Now I know it wasn't a financial hit, but General Motors deciding to pull its money out of Facebook ads dealt a big blow to your image. Are you still struggling with that image issue with Madison Avenue?

SHERYL SANDBERG: We're a new platform. And new platforms take time. They take time for people to adopt. And they take time for people to understand. The first thing people have to understand is that we're a different type of advertising-- of advertising opportunity. You know, the right ad on TV is not necessarily the right ad on Facebook. The right ad on Facebook invites people to really engage.

So a recent example, Gerber ran a promotion with us where they invited parents to take a picture of their own children and submit it for possible inclusion, you know, of one of the Gerber babies. And

it's a great ad campaign. 'Cause, you know, I'm a mom. Everyone thinks their kid's cute enough to be on-- on-- be a Gerber baby. And what they saw was an ad-- return on ad spend of almost \$4. Increasingly, as we're working with clients, we're able to show that return. And really this measurement, the measuring of offline sales is only something we've been doing this year. So it's very recent for us in the market.

JULIA BOORSTIN: And do you have any new ad products that you haven't announced yet?

SHERYL SANDBERG: So one of our new products, custom audiences, Fab.com has been using it, and enables them to target repeat customers rather than just the general public. Their conversion rates are up ten times using that product. That's just one of the many things we've rolled out in the last four months. So we feel very strongly that not only do we have a great opportunity ahead, but that we're already executing even more favorably against that opportunity.

SANDBERG ON PRIVACY

I think people do believe that we have an incentive to violate users trust to build our ad business. That's exactly wrong. We have every incentive to protect our users trust, so that we can build an advertising business that's very protective of the information they share. That's the whole business.

SANDBERG ON THE ECONOMY

You know, we focus on what we can control. And we can't control the state of the U.S. economy. And I do think-- you know, it's possible that the economy could go either way. I think we're in a tremendous period of uncertainty. Our job is to build a great business, whether that works in either direction. If the economy takes a downturn, which is obviously what most businesses worry about, we think that creates for marketers a flight to quality. When you have fewer dollars, you have to spend every one as effective-- as effectively as you can. And we think that creates a big opportunity for us. Because we believe we're one of the most effective place you can spend every dollar.

SANDBERG ON AD ENGAGEMENT

The right ad on Facebook invites people to really engage. So a recent example, Gerber ran a promotion with us where they invited parents to take a picture of their own children and submit it for possible inclusion, you know, of one of the Gerber babies. And it's a great ad campaign. 'Cause, you know, I'm a mom. Everyone thinks their kid's cute enough to be on-- on-- be a Gerber baby. But this really invited people to participate. And what they saw was an ad-- return on ad spend of almost \$4. Increasingly, as we're working with clients, we're able to show that return. And really this measurement, the measuring of offline sales is only something we've been doing this year. So it's very recent for us in the market.

SANDBERG ON AD RETURN

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SANDBERG ON WASHINGTON DC

JULIA BOORSTIN: There's been a lot of speculation that you're gonna return to Washington, D.C. Are you interested?

SHERYL SANDBERG: I really love my job at Facebook. I mean, I really think we do something that's super important, right? 950 million people, largest community anywhere on the world. I love what I'm doing and I plan to keep doing it.

SANDBERG ON FACEBOOK ATMOSPHERE

I think there is a lot of interest and speculation out there, "Oh my God, has everything blown up?" And the answer is really no. If you come to Facebook and you come to Facebook today for work, just as you did four months ago, I think we're a stronger company today than we were then.

SANDBERG ON CLOSE TO A BILLION USERS

JULIA BOORSTIN: You're close-- to one billion users. You're fast on the road to one billion users. What does that milestone mean for Facebook?

SHERYL SANDBERG: I think the one billion milestone-- when we hit it is a big deal. You know, we're the largest and most-engaged community of real people anywhere online. I think back to when Facebook started. And people thought it was literally absurd or-- unbelievable that they would ever put their real identity online. We have, you know, over 950 million real people, connected to real friends, sharing real things in their lives. And the fact that we could get to this scale and continue to grow is a really exciting milestone for the company.

SANDBERG ON FACEBOOK

JULIA BOORSTIN: How much time do you spend on Facebook every day?

SHERYL SANDBERG: A lot. Facebook's used a lot internally. We use our own product. Every product team has a Facebook group. We have lots of Facebook activity. It's part of how we run our company.

SANDBERG ON OVERSHARING

JULIA BOORSTIN: Does it scare you that you've helped create a generation of oversharers?

SHERYL SANDBERG: I think what we give is people the ability to share what they want. You know, what-- what is one person's, you know, ridiculous oversharing is another person's regular day. And we build technology that lets users share what they want to share. And that's tremendously, tremendously exciting. I don't pretend to judge what any individual does.

Facebook to FTC: Let Us Advertise to Children
Mashable
Alex Fitzpatrick
October 1, 2012

<http://mashable.com/2012/09/30/facebook-children-advertising/>

The Federal Trade Commission is considering an update to the Children's Online Privacy Protection Act (COPPA), a 1998 bill designed to protect children's online privacy. Most of COPPA's regulations are geared toward websites specifically designed for children under 13, such as Club Penguin.

COPPA's also the reason that children under 13 can't sign up for services such as Facebook — it's easier for a website to ban children under 13 than deal with COPPA's requirement on getting parental consent before collecting personal information from a child.

The FTC's proposal to change COPPA, announced last month, would add apps, games and online ad networks to the list of restricted platforms. If passed, the new rule changes could have a profound impact on sites used by both children and adults — including Facebook.

Websites used by people of all ages could ask users if they were 13 or younger, and if so, those users would be free to register. However, the new COPPA rules would prevent websites from tracking children's Internet behavior and displaying ads relevant to their perceived interests. The changes would also put new regulations on third-party providers, given they "know or have reason to know" their plug-ins are being used on a children's site.

The new rules, however, are less than clear on whether first-party advertising to children will be allowed. That's got some technology companies — a list that now includes Facebook — worried about what the new rules could mean for business.

Facebook, which has a business model heavily dependent on advertising, asked the FTC in a filing to clarify that websites will still be permitted to show first-party advertisements to children. It stressed that the FTC has previously treated first-party advertisements differently from third-party ads, and urged the FTC to do likewise in any new COPPA language on the basis that first-party ad content is more easily controlled by Facebook.

"The Commission emphasized in its report that it is generally consistent with the context of an interaction for a company to use data collected during first-party interactions for marketing purposes," reads Facebook's filing.

"It then distinguished marketing based on data collected as a third party, which the Commission argued was outside of the generally understood context of a consumer's interaction. The Commission should make that understanding explicit in the COPPA Rule by expressly including first-party advertising under the "internal operations" rubric. This clarification further supports the balance created between the Significant demand for free, advertising-supported services, and the expected tailoring of those services."

Facebook, which stressed that it supports COPPA's overall intent of processing children, also wants the FTC to ensure that it would still use tracking-based advertisements on adult users if children and adults were both using the site in the future.

Facebook has been looking for ways to allow children under 13 to use the site without violating COPPA since early June.

Facebook's full filing with the FTC is embedded [below](#).

Facebook gets support for major UK mobile operators' billing service, Payforit
The Next Web
Matt Brian
October 1, 2012

<http://thenextweb.com/facebook/2012/10/01/facebook-gets-support-major-uk-mobile-operators-billing-service-payforit/>

Just a week after it revealed that it had switched live its mobile payments platform for Facebook users in the US, UK and Germany, the carrier billing specialist today announced that it has integrated Payforit's single-click operator billing service for users in the UK.

Payforit is a mobile payments scheme that was created by the UK's five biggest operators: Vodafone, 3, O2, T-Mobile and Orange. With the service going live today, developers are able to offer in-app payments in their apps, games and Facebook services, drawing funds directly from the user's mobile tariff, lowering the barrier to entry and streamlining the payment process.

The carrier billing service was one of the first services to enable payments from mobile sites to be charged direct to the phone bill, regardless of the operator. The newest version of the platform is designed to improve the number of "payment drop-offs" by users, integrating directly with Facebook's HTML5 mobile site.

It's a popular platform, and is already being used by ImpulsePay, Gameloft, Electronic Arts and Samsung.

Ray Anderson, Bango CEO believes it's a "feather in the cap for UK networks", noting: "As we continue to build connections between Facebook and mobile operators across the world we're particularly glad to support cross platform approaches like this."

Last week, Bango said that it had rolled out its technologies within Facebook's mobile platforms to pave the way for digital content purchases without the need to enter payment details or sending premium rate SMS messages.

Bango's technology, which is already powering solutions offered by Amazon, RIM (via its BlackBerry App World) and Google Play, deducts funds from a user's existing mobile plan, keeping transactions secure while making them seamless in their operation.

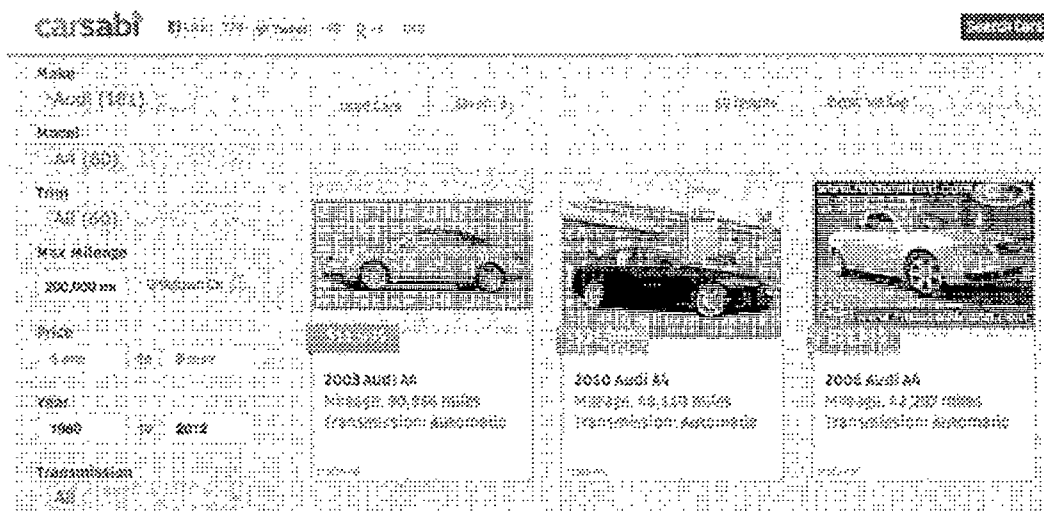
Facebook Acquires Founders Of Carsabi Who Will Sell Off Their Car Price Comparison Site
TechCrunch
Josh Constine
October 1, 2012

<http://techcrunch.com/2012/10/01/facebook-acquires-founders-of-carsabi-who-will-sell-off-their-car-price-comparison-site/>

Facebook's has just closed a deal to hire Dwight Crow and Christopher Berner, the two founders and only teammates of Y Combinator used car price comparison site Carsabi. The founders are now looking to sell the site, as Facebook won't be needing it.

Facebook tells me there wasn't something specific that attracted it to the co-founders other than that "they're awesome entrepreneurs". It won't say what team the founders will be joining. However, we see fitting in behind the wheel of Facebook Gifts or Events. Here's why.

TechCrunch named Carsabi one of YC Demo Day Winter 2012 's 10 Best Companies after seeing Crow (left above) and Berner (right above). The startup crawls all available online car sale listings including dealers and classifieds to find you awesome deals. It challenges AutoTrade with its unique features like sorting by biggest savings opposed to just the lowest price. Carsabi also integrates social so you can ask friends for purchase advice, oh, and spread the service virally.



That experience might make them a good fit to help the new Facebook Gifts team find people the perfect present at the perfect price. Perhaps, a “sort by price” option, a way to ask mutual friends what to buy someone, or option to throw down together on a bigger gift could come off a Carsabi-influenced Facebook assembly line.

Otherwise, the Events team might work, considering Dwight’s been throwing a few of them as a cast member on the soon-to-air Bravo reality show Silicon Valley. He’s known as quite jolly fellow, and could help Facebook Events evolve from a functional but somewhat cold calendar tool into something more fun and social.

Events got a smart, long-awaited redesign in July, and its Recommended Events sections are a huge help when you’re looking for something to do. However, it still lags behind Google+ Events, which can collect and share any photos your friends take at an event, and offers fancy Evite-style invitations. The Carsabi founders could use their place in the San Francisco social scene and the YC alumni network to test and promote a revamped Facebook Events product.

In any case, it’s nice to see that Carsabi respects its users enough not to just shut down their car search hub. That way rather than stifling innovation, this acquire might see a cool startup in the hands of new leaders passionate about disrupting the car buying experience.

Here’s the full text of the “We’re Joining Facebook!” blog post Carsabi just published:

“We created Carsabi back in Oct 2011 with the goal of easing the process of purchasing a used car, and providing a service that aims to index every automotive vehicle and connect more users to their car of choice each day.

But now it’s time for us to take a different turn. We want to take this impact to the next level – and help Facebook users connect and share. Because Facebook is not acquiring Carsabi.com, we’re looking for someone to buy the Carsabi service, so the two of us can focus on our new jobs. We can’t thank all of you that have used Carsabi enough – developing Carsabi has been an incredibly rewarding experience, and we hope we helped you think differently about how to find the perfect used car!

We want to give special thanks to our partners, customers and investors for helping us fulfill our dream.

Christopher & Dwight"

Facebook's Brad Smallwood Offers More Data On Ad Effectiveness, Says Datalogix Partnership Isn't A Privacy Risk
TechCrunch
Anthony Ha
October 1, 2012

<http://techcrunch.com/2012/10/01/facebook-brad-smallwood-datalogix/>

Facebook has been doing a lot of talking in the last day or so about its recently announced partnership with Datalogix — the company published blog posts explaining both the privacy implications and summarizing the results that advertisers have already seen. And Facebook's head of measurement and insights Brad Smallwood is at the IAB MIXX conference today, where he gave a talk about the partnership.

The goal of the partnership is to track whether Facebook ad campaigns are driving in-store sales and to find the common themes among the campaigns that work. Facebook and Datalogix have tracked about 50 ad campaigns from which they have already drawn three general lessons.

First, Smallwood said that ad impressions, rather than clicks, drive sales. In fact, in the DataLogix campaigns, 99 percent of sales were from people who saw ads but didn't interact with them. To back that up, he also pointed to a Nielsen study showing that there's virtually no correlation between clicks on ads and either brand metrics or offline sales. Smallwood added that focusing on clicks makes sense in some cases, such as direct-response campaigns, but those clicks don't tell you anything about "the outcomes that happen in the grocery store, in the car dealership, or in the local coffee shop."

Second, he said that reach (rather than just targeting a narrow audience) is an important part of these campaigns, just as it is in television. Brands that maximized the reach of their campaigns saw a 70 percent improvement in the return on investment.

Finally, he said brands need to optimize the frequency of their ad campaigns, specifically by reallocating impressions from people who see an ad frequently to those who don't. Seems like an obvious point, but Smallwood said brands who made that kind of shift saw a 40 percent increase in ROI. He also said the "frequency sweet spot" will differ from brand to brand, and from campaign to campaign — if you're an established consumer packaged goods (CPG) company, people probably don't need to see your ad as often as they would if you were launching a brand-new tech device and needed to get consumers familiar with the details.

Now, 50 campaigns may seem like a pretty small sample size, particularly since they weren't randomly chosen. But after his talk, Smallwood pointed out that the companies were selected by Facebook's "client council," so the social network couldn't just choose the advertisers that would see the most impressive results. Even though the initial campaigns came from CPG brands, Smallwood said there's no reason you couldn't expand the studies to include other types of advertisers.

So far, the partnership seems to have attracted attention (at least from the press) primarily for its privacy implications. When I brought up the privacy concerns with Smallwood, he said that neither

Facebook nor Datalogix should gain any additional information about individual users — instead, both companies use hashed data to create an aggregate picture of how many people who saw a given ad campaign actually bought related products.

By the way, if you want a more impartial analysis, here's how the Electronic Frontier Foundation laid out the process:

"This will provide Facebook with data about how well an ad is performing, but because the results are aggregated by groups, Facebook shouldn't have details on whether a specific user bought a specific product. And Datalogix won't know anything new about the users other than the fact that Facebook was interested in knowing whether they bought cranberry juice."

I asked if Facebook is feeling more pressure to monetize its user data now that it's a publicly traded company, and Smallwood responded that Facebook has been "building these systems right from the start" (presumably, he wasn't referring to the Datalogix partnership, but the general suite of ads and analytics products).

It's also worth noting that Datalogix is already tracking this kind of purchase behavior for non-Facebook ad campaigns, so it may seem a little unfair (though unsurprising) that the Facebook partnership is drawing so much scrutiny. Is Facebook being forced to clear a higher bar on privacy than other companies?

"I certainly feel like there's a lot of scrutiny on privacy," Smallwood said. "And there is a higher bar, but it's an internal bar that we hold ourselves to."

The Facebook game platform: Anyone can rise to the top of the charts (interview part two)
VentureBeat
Dean Takahashi
September 29, 2012

<http://venturebeat.com/2012/09/29/facebook-game-platform-anyone-can-rise-to-the-top-of-the-charts-interview-part-two/>

Need some advice about what kind of game to design next? Ask Sean Ryan.

He joined Facebook in January, 2011, in order to make sure that the social network understood the games and game publishers that were making Facebook into one of the world's largest gaming platforms. He is the director of game partnerships at Facebook and has to communicate Facebook's platform strategy for game companies and tell the broader story about one of Facebook's most successful application categories. About 235 million of Facebook's members have played a game in the past month, about 30 million more than a year ago. Mobile gaming has become one of the fastest-growing sectors of the business and Facebook is making it easier for mobile games to get discovered within its mobile app and on Facebook itself.

Here's part two of our edited interview with Ryan. [Check here for part one.](#)

GamesBeat: I think there are more than 100 casino games on Facebook. Does the number of games ever concern you? Do you think maybe there are too many concentrating in one genre? Too much copycatting or me-too stuff? Do you think users might get tired of it?

Ryan: We refer to that as the "Atari 2600 problem." We're old enough to get the reference. But we run an open platform. We encourage anybody with any type of game to launch on it. That's different from a console experience where every game has to be approved.

We do see, in certain areas, where saturation can take place. But casino's a great example. It looks to me like there's a lot of games in casino right now. And then Jackpot Party comes in from Williams Interactive. It came out of nowhere in the last two months. It's just a great example of how, even in a relatively crowded category, you can bring out a high-quality game with great intellectual property from Williams — which is a very well-known slot machine maker — and the game takes off.

What we do see in the more crowded markets is that you can't get away with a me-too or a cloned app. You need to be different in some way, and that's risky sometimes. Song Pop was risky. The issue comes down to discovery. That's where I think we thrive and continue to invest. How do we help users discover games, both on mobile and on desktop? Hopefully it's not just about the top 10 list, although that's a great way to do it. It's really about what your friends are playing and what you see in your feed. That's where we focus, because we think that's where we add value into the ecosystem.

GamesBeat: Zynga had given Wall Street cause to worry about the virality of their games on Facebook. They made a comment about that in their earnings. It looks like they may have some pretty successful games this quarter as well. ChefVille looks like it's doing great. Is there something, from your perspective, that affects any changes that you guys have made? Something that affects how well some games do?

Ryan: We always make changes. The key thing about our business and our overall channels is that we're continuing to evolve them. We're trying to make sure that the right types of games are being shown to people most likely to install and play them. We test all sorts of things. We want you to be able to find the game you're most likely to play, whether it's returning to a game you already have or installing a new game. I wouldn't say there's any significant shift we've made at all in the last six months.

If anything, we've brought out App Center, which has turned out to be quite a boon for the less viral games. So, for example, if you were a strategy game player, which is a type of game that often doesn't use our channels as much as a game like Song Pop, then it was harder to find those before. App Center enables that type of audience, the people who just want to go into that category to look for great games that they might like.

If anything, we've grown the monthly users of games quite significantly in the last six months. But these things also change month-to-month and quarter-to-quarter. If you look at the rise of King.com, for example, which didn't really exist on the platform 18 months ago. Now it's one of our top developers by daily active users (DAU). We see developers come and go depending on games. I agree that ChefVille and certainly FarmVille 2 are quite evolved, quite well-done games. I expect to see not just the Zynga-developed games, but also the games Zynga is publishing [from third-party developers], to do quite well on the platform. Take a look at the Rubber Tacos game that Zynga published. It's a physics-based platformer. It's a lot of fun.

GamesBeat: So the fluid nature of the rankings should give developers a lot of confidence? They do a good game, they can rise to the top?

Ryan: Yes. We try to make sure we're surfacing games that aren't just popular with everybody, but are popular with people like that type of game. We spend a lot of time on that. We continue to invest in becoming a better discovery forum.

GamesBeat: How do you become the best way to get games discovered on mobile? In this case, you guys don't own the platform. You're coexisting with things like Apple's Game Center or Gree or DeNA's Mobage and so on. You want to be more than just one more social platform, right?

Ryan: Absolutely. When we introduced our mobile platform around the beginning of the year, that was our first move to where you could integrate our full set of channels — our requests, our notifications, those types of things — into a mobile game. We always had Facebook Connect, but now we have the full platform. What that meant is, in the last six months the majority of the games in the top 10 of the Apple and Google stores use us.

The way we deploy it is, a lot of our users are on local already. These messages now take place so that you are notified on your iOS or Android device that a message has arrived, or a friend notification has arrived. You can launch and click and play that game, if there is a mobile version of the game, right now. We're increasingly seen by the developers as one of the largest sources of installs for the app stores. As we announced a couple of weeks ago, we have our paid app product that will coming out, helping our developers market and acquire a new set of users beyond our organic traffic.

It's still similar to desktop for us. We just see that many of our users use both desktop and mobile. So the way it works now is pretty cool. If you make a mobile game, you check those boxes in the developer tool that say, "Here's my Google ID number. Here's my iOS number." We know, therefore, when you send a friend notification or a friend sends it to you, that it will know to activate the game that you already have installed, or we'll send you to the store to download the game. That's how we do discovery right now. It regards the mobile phone as an extension of our desktop platform. We should be allowing you to discover games in the same way that you discover them on desktop. It's search, App Center, notifications, friend requests.

GamesBeat: Speaking of those underrepresented areas in Facebook games again.... I notice there's a few sports betting games that have come out. I wonder if that's another emerging area. How does a developer actually spot a trend like that? Is there something that they can digest that will tell them what the next hot area for a genre is going to be?

Ryan: By the time you see it, the games are already deployed. I would agree that the sports fantasy apps are certainly an area that was underrepresented. Sports games in general were underrepresented until recently, where we're starting to see a supply of them come out. Sports Casino is a good one. What we find is, developers know, in their heart, the type of game they want to build. Often it's what they see in other platforms, and they bring it to our platform or to a mobile platform. So it's less about them having to see what's emerging. As we see success stories around casual and arcade, we see a whole bunch of casual and arcade games come out. We try to signal, where we can, when we see openings, like in core and mid-core. I certainly agree with you on sports and sports fantasy. But it's hard for me to predict exactly what will be successful, because so many creative developers come up with concepts that are different enough and powerful enough that they break through the set of games that are there and become big hits.

GamesBeat: Is there anything else that's an interesting surprise for you, when you look at any of your gaming data?

Ryan: The rise of the casual and the arcade games was a surprise to me, as I talked about earlier. Song Pop was a surprise to me. I've known those guys for years, but I didn't see that coming, or how unbelievably fun it is. Everybody in the company was buying it, and when you have 18 million monthly users, a lot of them are playing it, too.

What continues to astonish me is how creative developers are, and especially as you see developers going back to look at, historically, what was popular. Bubble shooters are a genre that's been around in every type of category for probably 15 years. And yet developers figured out how to make a social version of it and fit virtual goods into it in a way that seems really fresh, in a way that I never would have anticipated.

And then the emergence of the core game as a big category for us, led by Kixeye of course. Because I'm actually a core gaming guy. I grew up playing Command & Conquer, DOOM, Quake, Total Annihilation, and Diablo. I think that'll be the next wave of games we'll see. They'll have a social layer on top of them, absolutely, but they'll be aimed at a much more core, classically male demographic.

GamesBeat: Do you have any trash talk for Google Plus?

Ryan: You know, I'm just gonna pass on that one. [laughs] We see a lot of players out in the marketplace. We just need to keep being a better platform.

Facebook Helps High School Soccer Player Turn His Season Around
WebProNews
Josh Wolford
October 1, 2012

<http://www.webpronews.com/facebook-helps-high-school-soccer-player-turn-his-season-around-2012-10>

Another month, another installment of Facebook Stories, Facebook's recently-launched initiative to highlight the ways in which their platform helps normal people in extraordinary ways. This month, the theme is "Virality."

And the story involves Daniel Cui, a high school soccer player who had a rough start to the season with a series of blown saves. The goalkeeper became the butt of jokes on the network, but eventually was propelled to victory by a coordinated effort on Facebook by his teammates and others at his school.

Every month, Facebook Stories has a new theme. In August, the theme was "Remembering" and the main story tracked a man who pieced his life back together after an brain illness made him forget everything in his life. Last month, we saw the story of an ichthyologist who used Facebook to crowdsource the identification of thousands of different species of fish.

As part of Facebook's "virality" theme this month, they are hosting a Facebook Live session with Carly Rae Jespen to discuss how things go viral. That will take place on October 6th at 1 pm ET.

General Tech

Why Google Doesn't Own the Next Chapter in Web Ads

All Things Digital

Peter Kafka

October 1, 2012

<http://allthingsd.com/20121001/why-google-doesnt-own-the-next-chapter-in-web-ads/>

Heads up: It's "Advertising Week" in New York, which means that lots of ad-related companies are going to put out press releases with even less substance than usual.

That said, we can at least do some scene-setting for you courtesy of new forecasts from ZenithOptimedia, the media buying/research group. The official headline today is that Zenith has cut its global ad spend forecast for the year from 4.3 percent to 3.8 percent, because a big chunk of Europe is melting down.

But the news would be if a forecaster didn't acknowledge the fact that people are eating out of trash cans in Spain. And in any case, Zenith expects Europe to start improving as early as next year.

So let's focus instead on the different places advertisers can put their dollars. Here's Zenith's breakdown for the U.S. market:

Share of total adspend by medium (%)

| | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|------|------|------|------|------|
| Newspapers | 21.4 | 20.2 | 18.9 | 17.9 | 16.8 |
| Magazines | 9.8 | 9.4 | 8.8 | 8.3 | 7.9 |
| Television | 39.7 | 40.2 | 40.4 | 40.4 | 40.3 |
| Radio | 7.1 | 7.1 | 7.0 | 6.9 | 6.7 |
| Cinema | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Outdoor | 6.7 | 6.6 | 6.5 | 6.4 | 6.3 |
| Internet | 14.7 | 16.0 | 17.8 | 19.6 | 21.4 |

Since you're reading this site you know the broad strokes: New media growing, old media slowing. But do take another look at those TV dollars, which remain dominant and unmoved. Digital's growth, to date, remains fueled in large part by the decline of print.

Things get most interesting when you dive deeper into digital, and look at how that money is being split up. For a very long time, "Internet advertising" has essentially meant "paid search advertising," which means Google.

Not anymore. Display ads are finally gaining speed.

Internet advertising by type

US\$ million, current prices *Currency conversion at 2011 average rates.*

| | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------|--------|--------|--------|---------|---------|
| Display | 22,543 | 27,444 | 32,757 | 39,173 | 46,892 |
| Classified | 11,443 | 11,063 | 11,830 | 12,571 | 13,296 |
| Paid search | 33,851 | 38,111 | 43,826 | 50,016 | 56,649 |
| Total | 67,837 | 76,618 | 88,413 | 101,761 | 116,837 |

Source: ZenithOptimedia

Globally, display ads will be growing at a 20 percent clip the next couple years, Zenith says, while paid search will move at 14 percent. Google is a big player in display advertising, too — it has been spending heavily on acquisitions there for years — but it doesn't have anything like the lead it does in search.

That's a big growth story for Facebook and a potential lifeline for Yahoo and AOL. And if somebody else wants to build a business based on selling ads — not just eyeball acquisition, but the actual work of turning those eyeballs into marketing opportunities — that's a real opportunity for them, too.

Square Acquires a New York Design Firm
The New York Times
Claire Cain Miller
October 1, 2012

<http://bits.blogs.nytimes.com/2012/10/01/square-acquires-a-new-york-design-firm/>

Tech companies, in a high-stakes competition for engineers, are also chasing another highly prized kind of employee: designers.

Square, the popular mobile payments company, has proved just how important designers are by making a surprising acquisition. It announced Monday that it has bought a New York design firm, 80/20, which specializes in user interface design, or designing the parts of apps, Web sites and devices that people touch and maneuver.

Designers have become a hot commodity in Silicon Valley as tech companies realize that the way their products look and the way that people interact with them is just as important as the underlying software — a lesson learned in part from Apple.

Lately, pitches from new start-ups are likely to include words like elegant, beautiful and intuitive. These are also common words in the vocabulary of Square's co-founder and chief executive, Jack Dorsey.

Many of the most creative design minds are not in Silicon Valley but in New York, including those at 80/20. Its designers will stay in their SoHo office, which will become the New York headquarters for Square, which is based in San Francisco. About 50,000 of Square's customers — mostly small businesses like coffee shops and boutiques — are in New York.

The founders of 80/20 previously worked at Apple and Adobe. Its dozen designers will do design work only for Square from now on. Its past clients include Warner Brothers, Comcast and Fidelity. It designed, for instance, a dashboard for the electric vehicle company Better Place and a fitness-tracking watch for Motorola.

In a statement on Monday, 80/20 described its design philosophy as “the belief that the best design gets out of the user’s way and that you can craft unforgettable user experiences by keeping things simple and obsessing over the details.” The design firm’s natural next step, the statement said, was to focus on a single company, Square.

Google Catalogs Comes To The Web, Now Integrated With Google Shopping
TechCrunch
Frederic Lardinois
October 1, 2012

<http://techcrunch.com/2012/10/01/google-catalogs-comes-to-the-web-now-integrated-with-google-shopping/>

Google Catalogs launched as an iPad and Android app in August 2011. Just ahead of the holiday shopping season, Google is now also making this service available on the web. Google Catalogs on the web will feature brochures from about 300 brands, including the likes of Williams-Sonoma, J.Crew, Eddie Bauer, and Bose. From within the catalogs, shoppers can click on featured items to get more information and, of course, buy them from the retailers’ own sites.

If you’re hoping to browse the latest electronics catalogs, though, you will likely be disappointed by Google Catalog’s selection. The focus here is clearly on mainstream consumers. The featured catalogs currently include Fossil, Crate & Barrel, HarthSong and The Wisconsin Cheeseman (which apparently also lets you buy your cheese on a monthly installment plan).

Google says it plans to “incorporate catalogs more deeply throughout the Google Shopping experience, giving you more ways to find ideas and inspiration as you shop and engage with your favorite brands.”

This, of course, isn’t Google’s first foray into digitizing catalogs. All the way back in 2001, the company launched a beta version of Google Catalogs that allowed users to browse their PC Connection catalogs online. That service, however, was retired in 2009 (and had already been rather neglected before this). Google then resurrected the concept as a mobile app before last year’s holiday season.

It’s worth noting that Microsoft recently unveiled a similar project in cooperation with Glimpse Catalogs.

Zynga turns on the viral charm with FarmVille 2
VentureBeat
Dean Takahashi
October 1, 2012

<http://venturebeat.com/2012/10/01/zynga-turns-on-the-viral-charm-with-farmville-2/>

FarmVille 2 is kicking into high gear as Zynga has begun to open up its viral channels to help the game spread.

Zynga quietly launched FarmVille 2 on Sept. 5. As we noted on that day, FarmVille 2 carries immense importance for San Francisco-based social gaming giant. As Zynga’s earnings took a dip in the second quarter, and its industry-changing “Ville” series of social games began to lose their novelty, the company has a lot at stake with FarmVille 2. At first, the game had a relatively small audience as

Zynga's engineers tuned the game based on feedback from players. Zynga has evidently moved past that stage into turning on its full viral marketing channels, where it cross promotes the game to its existing users.

Now Zynga has 15.2 million monthly active users for FarmVille 2, up 13.5 million from just a week ago, according to market researcher AppData. Just eight days ago, FarmVille 2 had only 1.7 million monthly active users. On a daily active user basis, FarmVille 2 has 6.9 million users. FarmVille 2 is now the fastest-growing game on Facebook.

The original FarmVille grew its audience to as 83 million monthly active players. It introduced social games to the mainstream and became one of the most broad-reaching titles in history, even as critics said it wasn't really a real game. So the remake is akin to Zynga's best shot at launching social gaming 2.0, and game designers like Zynga's Tim LeTourneau said that created FarmVille 2 to become a lot more addictive and game-like.

Zynga now has more than 344 million monthly active users on both Facebook and mobile platforms. FarmVille 2 is Zynga's ninth-largest game at the moment. The top of the heap is Zynga Slingo, with 53 million users. ChefVille has 50.2 million users, and Texas HoldEm Poker has 39.3 million users. I've been playing the game and have gradually climbed to level eight, and I have a real farm ecosystem going where I can generate a lot of income by growing my ingredients and the using them to create high-value foods for the village market.

The new FarmVille 2 has better graphics based on the Flash 11 format (and Stage 3D) that Adobe has created to improve animations in web-based games. The characters and animals are created using 3D graphics though they are displayed in the familiar isometric, two-dimensional perspective. The animations look more fluid, and the landscape is more interactive as you move your mouse cursor over the screen. FarmVille 2 is an attempt to capitalize on how web-gaming technology has moved forward in just three years.

The Perils of Texting While Parenting
The Wall Street Journal
Ben Worthen
October 1, 2012

<http://professional.wsj.com/article/SB10000872396390444772404577589683644202996.html>

One sunny July afternoon in a San Francisco park, tech recruiter Phil Tirapelle was tapping away on his cellphone while walking with his 18-month-old son. As he was texting his wife, his son wandered off in front of a policeman who was breaking up a domestic dispute.

"I was looking down at my mobile, and the police officer was looking forward," and his son "almost got trampled over," he says. "One thing I learned is that multitasking makes you dumber."

Yet a few minutes after the incident, he still had his phone out. "I'm a hypocrite. I admit it," he says. "We all are."

Is high-tech gadgetry diminishing the ability of adults to give proper supervision to very young children? Faced with an unending litany of newly proclaimed threats to their kids, harried parents might well roll their eyes at this suggestion. But many emergency-room doctors are worried: They see the growing use of hand-held electronic devices as a plausible explanation for the surprising

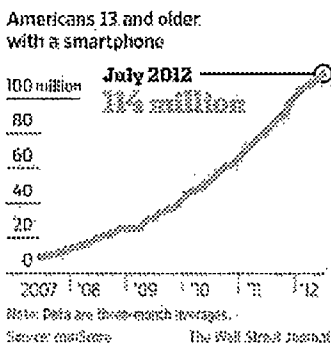
reversal of a long slide in injury rates for young children. There have even been a few extreme cases of death and near drowning.

Nonfatal injuries to children under age five rose 12% between 2007 and 2010, after falling for much of the prior decade, according to the most recent data from the Centers for Disease Control and Prevention, based on emergency-room records. The number of Americans 13 and older who own a smartphone such as an iPhone or BlackBerry has grown from almost 9 million in mid-2007, when Apple introduced its device, to 63 million at the end of 2010 and 114 million in July 2012, according to research firm comScore.

Child-safety experts say injury rates had been declining since at least the 1970s, thanks to everything from safer playgrounds to baby gates on staircases to fences around backyard swimming pools. "It was something we were always fairly proud of," says Dr. Jeffrey Weiss, a pediatrician at Phoenix Children's Hospital who serves on an American Academy of Pediatrics working group for injury, violence and poison prevention. "The injuries were going down and down and down." The recent uptick, he says, is "pretty striking."

Childhood-injury specialists say there appear to be no formal studies or statistics to establish a connection between so-called device distraction and childhood injury. "What you have is an association," says Dr. Gary Smith, founder and director of the Center for Injury Research and Policy of the Research Institute at Nationwide Children's Hospital. "Being able to prove causality is the issue.... It certainly is a question that begs to be asked."

It is well established that using a smartphone while driving or even crossing a street increases the risk of accident. More than a dozen pediatricians, emergency-room physicians, academic researchers and police interviewed by The Wall Street Journal say that a similar factor could be at play in injuries to young children.



"It's very well understood within the emergency-medicine community that utilizing devices—hand-held devices—while you are assigned to watch your kids—that resulting injuries could very well be because you are utilizing those tools," says Dr. Wally Ghurabi, medical director of the emergency center at the Santa Monica-UCLA Medical Center and Orthopedic Hospital.

Adds Dr. Rahul Rastogi, an emergency-room physician at Kaiser Permanente in Oregon: "We think we're multitasking and not really feeling like we are truly distracted. But in reality we are."

Representatives for Apple and Research In Motion declined to comment.

The three-year increase in CDC child-injury numbers could be a statistical anomaly. Child-injury experts say there could be other factors contributing to the increase, including riskier behavior among children or an increasing tendency for parents to drag children to emergency rooms.

Susan Hudson, a professor at Northern Iowa University and education director of the National Program for Playground Safety, says budget cuts by schools and local governments could be a factor. "You're hitting into an economic downturn," she says. "One thing that happens is that you have maintenance going out the window."

But those explanations, some experts say, don't square with the injury numbers for older children during that period. The rates of increase were smaller for older age brackets, when adult supervision typically tails off. Unintentional injuries among kids ages five to nine increased 5% between 2007 and 2010, and 3% for kids ages 10 to 14, according to the CDC. For 15- to 19-year-olds, injuries decreased 3%.

Young children "have a natural risk to hurt themselves if they are not properly watched by an adult," says David Schwebel, a professor of psychology at the University of Alabama at Birmingham who specializes in injury prevention. "If the adult is distracted, clearly the risk is increased. We know that drivers and pedestrians are distracted and more at risk when they use devices. It's a fairly small leap to suggest that supervisors are distracted."

Statistics from the government's Consumer Product Safety Commission, which tracks injuries by product type, show children are getting hurt more during activities and at ages that would seem to warrant close supervision. Injuries involving playground equipment among children under five jumped 17% between 2007 and 2010, after trending down the previous five years, the commission said. Injuries involving nursery equipment such as changing tables were up 31% among children under five over that period, after declining over five years. Injuries involving swimming pools climbed 36% in that age group after a slight increase over the prior five years.

The kind of data that might be useful for establishing whether there is a direct link between child injury and device use by supervising adults aren't often collected. Doctors say that when they see a child who appears to have a broken arm, for example, they order X-rays and don't ask parents what they were doing at the time of the injury. In the case of serious injuries that involve a police response, subsequent reports usually don't note what a parent was doing during an accident, except in cases of suspected neglect.

Overall, parents typically don't self-report distraction as a cause for accidents. "Folks are not going to admit to the fact that—look I was doing this, and that's why my kid fell off and broke his arm," says Dr. Ghurabi.

Further complicating the picture, researchers say, is that people tend to underreport the amount of time they spend on their mobile devices. Device users don't consider themselves distracted when checking email, for example, something they put into a different category than watching television or reading newspapers.

Barbara Morrongiello, a psychology professor at the University of Guelph in Canada who has studied the relationship between child-supervision and injury, says that most people don't realize how much they are distracted by devices. If you ask a parent or caregiver who is sending a text message "if they are paying attention, they would say, 'of course,'" she says. People "often underestimate how much time they're taking to do something."

One afternoon at a swimming pool at a Foxwood Resort Casino hotel in Connecticut, Habibah Abdul-Hakeem was watching a friend's 2-year-old son when another friend texted, asking how her day was going. She texted back that she would send him a photo of herself.

The child sat down on a step in the pool, slipped and began sinking, according to an April 2011 sworn statement by the responding police officer, who said he reconstructed the episode based on security-camera footage and Ms. Abdul-Hakeem's account to police. There was no lifeguard. The boy flailed for about a minute, drifting toward the deep end, then sank. Ms. Abdul-Hakeem, standing beside the pool, was looking at a photo on her smartphone, the police officer said.

About three minutes after she began fiddling with the phone, she dropped it. Only then did she notice the young boy underwater, the officer said. She plunged in and pulled him out. Her calls for help brought a pool attendant who resuscitated the child, who recovered fully.

Ms. Abdul-Hakeem told an emergency technician that she had taken her eyes off the boy for about 20 seconds, according to the police statement. The security-camera footage suggested she didn't look at him for more than three minutes, according to the officer.

The Connecticut state police charged Ms. Abdul-Hakeem, then 35, with reckless endangerment in the second degree and risk of injury to a minor. A clerk in Connecticut state court said that the case is pending and the records are sealed. Ms. Abdul-Hakeem didn't respond to requests for comment. Parents have been collecting their own stories about device distraction. In February, Hope Hughes, a stay-at-home mom, was at a playground near her Chicago home with her daughter, then four, when she heard a thunk—the sound, she says, of a young boy hitting his head on equipment. She says she comforted the boy as his head swelled and he bent over, throwing up.

She says about eight minutes passed before a woman she had seen using a mobile device nearby noticed what was happening and came over. It was the boy's nanny. "She was texting or surfing or something and wasn't paying any attention," Ms. Hughes says.

Ms. Morrongiello, the Canadian psychology professor, says that information she collected from 62 families with two-year-old children revealed that 67% of injuries occurred when a parent wasn't supervising or was only listening intermittently, and only about 10% occurred when a parent was watching. In another study, she found that 7- to 10-year-old children who either were left unsupervised or were supervised indirectly tended to get hurt more.

Cellphone distraction may have played a role in a tragedy that befell one Florida family. On Dec. 14, 2009, Shellie Ross called to her two sons, age 2 and 11, to come see a tortoise in the family's backyard in Merritt Island. At 5:17 p.m., she posted a cellphone photo of the tortoise on Twitter. Records of her tweets show she tweeted four more times over five minutes.

At 5:23, operators took a 911 call from the 11-year-old, police records show: His little brother was at the bottom of the swimming pool, unresponsive. The police report says that Ms. Ross pulled the boy out and performed CPR. Rescue workers rushed him to the hospital, but it was too late.

Ms. Ross told police at the time that she thought the boy was with his older brother. Police ruled the death an accident. Seven months later, the Florida Department of Children and Families concluded that "the death was a direct result" of inadequate supervision. The report noted: "mother twittering at the time the child passed."

Ms. Ross didn't return calls seeking comment.

Ira Hyman, a professor at Western Washington University who specializes in human memory and cognition, contends that mobile devices are more distracting for parents than radio, conversation and other outside-the-home diversions of yesteryear. Scientists aren't exactly sure why, he says, but when a person is using a device, "you can have something pass directly in front of you and your eyes may see it but it doesn't really enter your awareness."

Sociologist Clifford Nass of Stanford University has found that people who stare at a device take a while to refocus. He says that doing so while supervising a child, even if a parent regularly looks up, would make the parent more likely to miss the kind of warning signs that frequently precede a mishap. Playground accidents, for example, often are the result of a sequence of events, such as climbing too high on a jungle gym. "What mobile technologies do is essentially remove you from the situation," he says. "The ability to anticipate problems is much more reduced."

In a 2010 survey by the Pew Research Center, 14% of adults and 22% of adults who send text messages reported being so distracted by their devices that they have physically bumped into an object or person.

Nevertheless, researchers have found, people who complete a task on a device don't report feeling impaired. That may explain why many adults continue to use devices when supervising children.

Psychologist Kathy Hirsh-Pasek of Temple University recently had students observe 30 parents and their children in public places. In almost every case, she says, the parent interrupted an activity with the child to use a device. "In one case a parent let go of her kid's hand in the middle of a big street in Philadelphia in order to check a text message," she says.

Studies have found that children are more likely to take risks when they aren't watched carefully. "It may be that children can perceive the inattention and take more risk," says Dr. Schwebel, the psychologist at the University of Alabama. When a parent is on a device, "your kid may know that you are there but not paying much attention."

Kayla Cory, co-owner of Wonderwild, an indoor play area in Houston, says that she sees it regularly. "People bring their kids in, turn their backs and turn on their phones," she says.

"I go up and ask parents to pay attention to their kids," she says. "We just assume that as long as we're in the same room with them that they're safe. But kids will find a way to hurt themselves."

Google expands analytics toolset with Tag Manager
ZDNet
Rachel King
October 1, 2012

<http://www.zdnet.com/google-expands-analytics-toolset-with-tag-manager-7000005047/>

Google is expanding its digital marketing capabilities with the introduction of the Google Tag Manager.

Supporting both Google and non-Google website tags, the Tag Manager consolidates tags through a snippet of code. This can be managed through web interface where users can add and manage tags without having to rewrite the site code or involve IT.

Some of the features range from simple tasks to preview mode and tag templates to more in-depth functions such as debugging console and asynchronous tag loading designed to prevent any slow down on the user-visible part of the site.

Laura Holmes, a product manager on the Google Tag Manager team, explained on the Google Analytics blog on Monday that the goals of the Tag Manager is to fine-tune the tagging process altogether:

“Tags are tiny bits of website code can help provide useful insights, but they can also cause challenges. Too many tags can make sites slow and clunky; incorrectly applied tags can distort your measurement; and it can be time-consuming for the IT department or webmaster team to add new tags—leading to lost time, lost data, and lost conversions.”

Additionally, Holmes asserted that this will also give marketing departments more flexibility for developing better informed campaigns to reach their customers in new ways.

Another feature designed specifically for marketers include multiple account functionality and user permissions so that large marketing teams can work together but at varying levels of access to the Tag Manager as well as the company/campaign website.

The Google Tag Manager is a free tool and will be launching in English first with support in additional languages promised soon.

Miscellaneous

I Got Fired From Facebook And Cost Myself \$100 Million
Business Insider
Henry Blodget
October 1, 2012

<http://www.businessinsider.com/i-got-fired-from-facebook-2012-9>

A former Facebook product manager named Noah Kagan has written a brutally honest article about how and why he got fired from Facebook in 2006 and what he learned from it.

The experience must be particularly painful, given that it eventually cost Kagan a \$100 million fortune.

So the fact that Kagan has not only learned from it and is now willing to share these lessons with others is a major tribute to him.

Kagan joined Facebook in 2005, about a year after Mark Zuckerberg started the company in his Harvard dorm room. Eight months later, when Facebook had grown from a tiny startup with ~30 people to a global phenomenon with more than 150 employees, Kagan got canned.

With the benefit of hindsight, he now understands why.

In short, as Facebook grew, it needed people with different skills, and Kagan's skills and attitude didn't grow with the company.

This is something that anyone who has worked at a rapidly growing startup can relate to. And Kagan's experience is one that has been shared by thousands of executives over the years, including many at Facebook.

The biggest lessons Kagan learned, he said, were these:

- During his time at Facebook, he was selfish--it was all about him: "I wanted attention, I put myself before Facebook. I hosted events at the office, published things on this blog to get attention and used the brand more than I added to it. Lesson learned: The BEST way to get famous is make amazing stuff. That's it. Not blogging, networking, etc."
- The best way to ensure that you'll never get canned is to keep finding ways to make your company more valuable. "Go see if your weaknesses are hindering you at your job. I.e. I wasn't great at planning or product management at this time. Fix them or move to other position. Also, constantly ask yourself how can I make the company more valuable. You do that and you will never get fired*. *unless you do something really stupid or the company goes out of business."

Kagan is now the Chief Sumo at AppSumo. The intro to his post is below. You can read the rest on his blog, OkDork:

Can I be real with you? Real real?

I'm TIRED of answering this question so I'd rather write it out and just point people to this post.

Let me start in reverse.

I can tell you every detail of the day I got fired aka "let go" aka "down-sized" aka "[]-canned."

I thought I was going to a routine coffee with my boss and randomly saw Matt Cohler sitting at the table inside (surprising)!

I knew something was amiss. Matt broke the news quickly and I was in dead-shock as the words came out of his mouth. They walked me back to the office and removed my laptop and my cell phone.

Then I proceeded to the Verizon store to use their phone, called my gf (at the time) and drove to the house I shared with 6 other FB guys.

Packed up all my stuff in my CRX, smoked a 1/2 pack of cigarettes on the balcony and drove to my friend Johnny's place. It took me a bit to let my mom know and I slept on Johnny's couch for a few days, thanks J!

Later that night we had a bbq at this place and everyone was asking me how the job was going....#awkward

I kept drinking that night to pass out and pray this was all a bad dream.
At that time, here's the order of what was important in my life:

- 1- Facebook
- 2- Myself
- 3- Food / Shelter
- 4- My gf
- 5- Family
- 6- Friends

To spell it out. Facebook was my entire life.

My social circle, my validation, my identity and everything was tied to this company.

How could have ended up like this?

WTF! I just got a promotion and a raise 2 months before!

This was my first time being fired and it took me 1 year to get over the depression...

EXHIBIT 29

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EXHIBIT 30

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EXHIBIT 31

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EXHIBIT 132

UNSEALED VERSION OF DOCUMENT PURSUANT TO THE NOVEMBER 1, 2018 ORDER


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The New Facebook Login and Graph API 2.0

by Joffrey Spehar - April 30, 2014 at 10:40am

Today at f8, we introduced a new Facebook Login experience that gives people more control over the information they share with apps. We also announced a two-year stability guarantee for core products along with a new version of the Graph API to help you build, grow, and monetize your apps.

The new Facebook Login and the announcements below are available to all new apps starting today while existing apps have a full year to upgrade (April 30, 2015).

Giving people more control with the new Facebook Login

Facebook Login is a fast and convenient way for people to sign into their favorite apps without having to remember another password. In 2013, we updated Login to clarify when an app is requesting permission to share back to Facebook. This change contributed to a 10% increase in Login conversion rates over the past year.

Today, we're making additional improvements to Login based on people's feedback:

First, people want more control over sharing their personal information with apps. The new Facebook Login lets people edit the info that they provide:

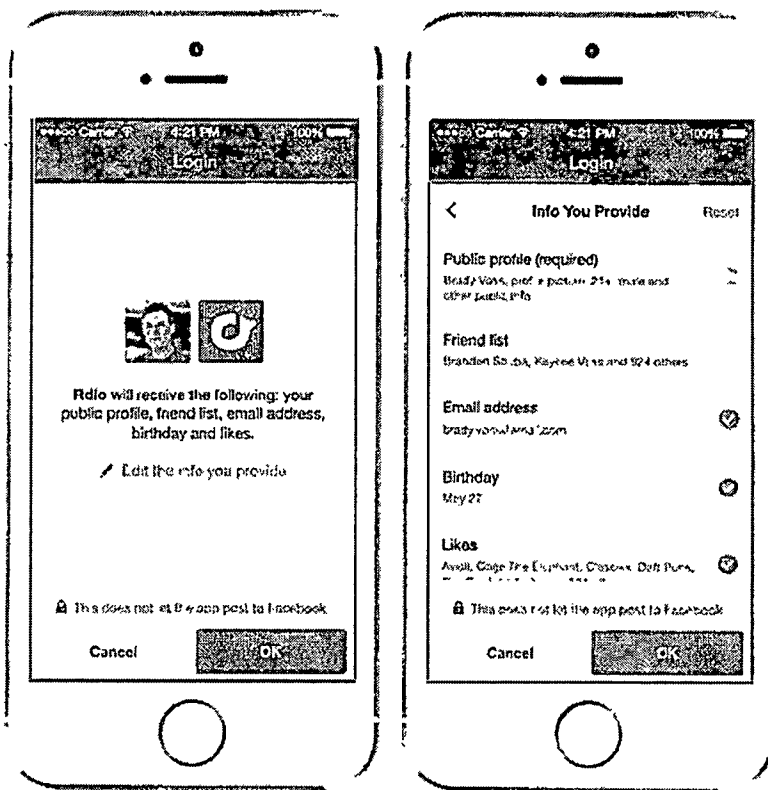


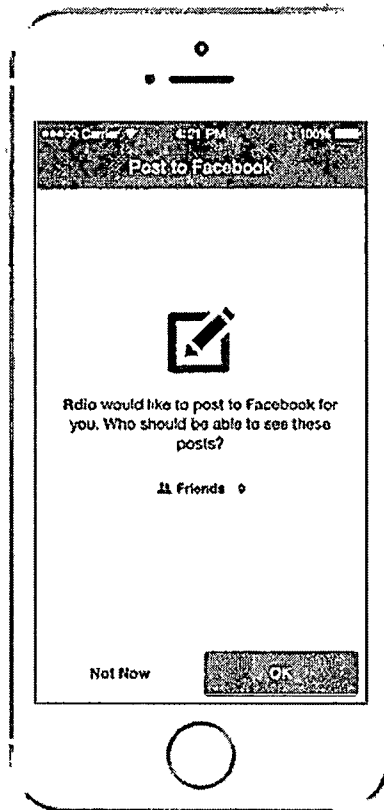
EXHIBIT 3

ALLISON HENDRIX

6/21/17

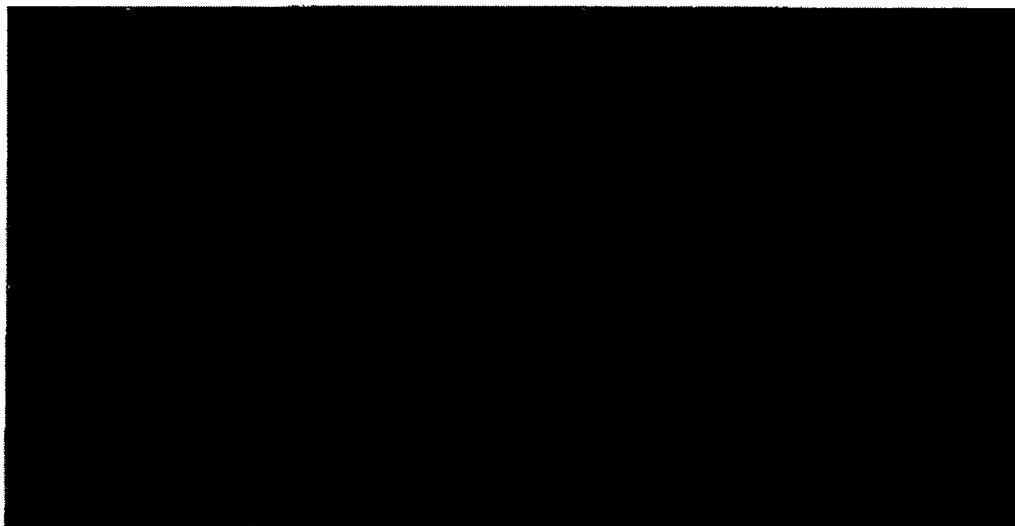
Reported by: Holly Thuman
CSR 6834, RMR, CRR

We've also introduced a new design for when apps are requesting permission to post back to Facebook. This design highlights the audience that apps will post to:



Second, we've heard from people that they're often surprised when a friend shares their information with an app. So we've updated Facebook Login so that each person decides what information they want to share about themselves, including their friend list.

Third, people tell us that some apps ask for too many permissions. To address this, we're extending our existing App Center and Open Graph review process to Login. During **Login Review**, we'll look at and approve any permissions that an app requests beyond public profile, e-mail and friend list. Our goal is to help apps follow best practices while still keeping the review process fast and lightweight.



Finally, some people want to log into apps without sharing their Facebook information at all. With **Anonymous Login**, people can do just that. Apps will still get the benefit of Facebook identity verification and cross-platform sync, and people can easily upgrade to the full Facebook Login experience later on.



We know that you've spent a lot of time building a great app experience, and we are confident these changes will continue to help more people get into your app quickly and easily.

A more stable platform with Versioning and Graph API 2.0

At f8, we also announced **API Versioning** and a two-year stability guarantee for core products such as Login, Sharing, Requests, SDKs and frequently used Graph API endpoints. This means that if we make any changes to these products, we'll continue to support the previous version for at least two years. Versioning also gives you control over how you upgrade different instances of your app to use the latest platform features.

Important new elements of Graph API 2.0 include:

- **App-scoped user IDs:** To better protect people's information, we will begin to issue app-scoped user IDs instead of original user IDs for people who first login to your app using Graph API 2.0. People who have already logged into your app will still retain their original user ID. If you operate multiple apps, the Business Mapping API lets you map the same person's ID between them.
- **Test Apps:** An easy way to create and manage apps for use in testing, development and staging, test apps also serve as a central place to manage people's roles across all of your apps.
- **Social Context API:** A simple way to surface a person's friends' activity alongside your content.
- **Tagged Places API:** An easy way to build experiences using the places where a person has been tagged.
- **Tagging and Inviting APIs:** New APIs to help you build interfaces for tagging friends in stories and inviting friends to use your app.

In addition to the above, we are removing several rarely used API endpoints; visit our [changelog](#) for details.


Sign up today for a Facebook Login Workshop near you

Over the next few months, we will host a series of Facebook Login Workshops around the world to help you upgrade your app for these changes. [Sign up for a Login workshop today.](#)

Learn more

You can learn more about these announcements by visiting:

- [Facebook app development guide](#)
- [Facebook Platform changelog, versioning and upgrade guide](#)
- [Overview of the new Facebook Login, best practices and Login Review](#)
- [Questions? Sign up for a Login Workshop, submit a support ticket or join our Facebook Developers group](#)

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Sol Italia · Secretary at En Mi Casa

No puedo enviar mails, ni ver mis contactos, me parece una falta de ética que no me den los motivos

Like · Reply · Sep 5, 2015 2:27pm



Filip Rad · Photographer at MET ART



Like · Reply · Sep 4, 2015 10:49am



Fernando Gonzales Rojas

Por favor enviar información en español

Like · Reply · Sep 1, 2015 2:43am



Eric Geynes · Actor at Acting

if you don't provide a way of finding friends who are not part of a list, why don't you allow another application to do so? if we want to give permission, we WANT TO! This is ridiculous

Like · Reply · Aug 29, 2015 7:46am



Ivonne Velazquez · Pasante de Enfermería at Hospital General Dr. Fernando Quiroz

en español

Like · Reply · Aug 26, 2015 9:02am



Joel Kabambe · Clinician at Ministry of Health

This is cool. Lets uwe it and het motivated

Like · Reply · Aug 28, 2015 5:58am



Rlando Heusa Mondoy · Manila, Philippines

6610ST

Like · Reply · Aug 27, 2015 10:55pm

Jolanda Hart · //

hay

Like · Reply · Aug 24, 2015 5:42am



Tamu Devis Solteeg · University of Delhi

I LIKED MORE THEN I COULD SAY.

Like · Reply · Aug 21, 2015 6:34am

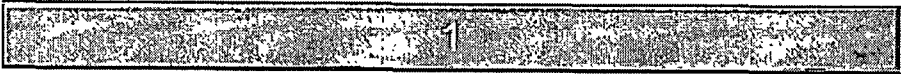


Abdoul Toure Touabotraiteur · Works at Seine-Saint-Denis, le département (Page officielle)

Touabo traiteur vous propose des buffets de cocktail chaud et froid entrées plats desserts boissons. Les décoration des salle de mariages anniversaires...

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Like · Reply · Aug 17, 2015 11:56am



Facebook Comments Plugin

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Facebook Platform Changelog

This changelog covers what's changed in Facebook's APIs. These changes include Facebook's server-side APIs, Facebook SDK for JavaScript, dialogs and other services.

The most recent version of the API is Version 2.4, which was introduced on July 8, 2015.

To learn more about versions, please see our overview of how versions work.

For more info on upgrading, including code samples, please see our expanded upgrade guide.

Versions:

| Version | Path | Date Introduced | Available Until |
|---------|----------------|------------------|----------------------------------|
| v2.4 | /v2.4/{object} | July 8, 2015 | At least until July 8, 2017 |
| v2.3 | /v2.3/{object} | March 25, 2015 | July 8, 2017 |
| v2.2 | /v2.2/{object} | October 30, 2014 | March 25, 2017 |
| v2.1 | /v2.1/{object} | August 7, 2014 | October 30, 2016 |
| v2.0 | /v2.0/{object} | April 30, 2014 | August 7, 2016 |
| v1.0 | /v1.0/{object} | April 21, 2010 | Unavailable as of April 30, 2015 |



Related Topics

- Platform Upgrade Guide
- iOS SDK Changelog
- Android SDK Changelog
- Marketing API Changelog

July 8th, 2015 - API version 2.4

New Features

English (US) ▼

[Give Feedback](#)

Facebook has introduced a new set of metrics for the Facebook Platform. These metrics require the `publish_actions` permission.

New Video Features

The `video` node now contains the following fields in the `POST` operations to `/v2.4/{object}/video`:

- `content_type` which supports categorizing a video during video upload, and can be used

for suggested videos. Content categories include: Business, Comedy, Lifestyle, etc and a full list of categories can be viewed on the [Video node docs](#) page.

- `attachments_content_type` will expose 3 new types (Scheduled, Draft, and Ads_Post) which will help coordinate how the video is posted.
- `expiration` and `expiration_type` allows the video expiration time to be set, along with the type (hide, delete).
- `embeddable` boolean flag is now available to control if 3rd party websites can embed your video.

Accessing Timeline Posts

We've simplified how you access content on a person's Timeline. Instead of handling different object types for statuses and links, the API now returns a standardized Post node with attachments which represent the type of content that was shared. For more details view the [User reference docs](#).

For Marketing API

For Marketing API (formerly known as Ads API) v2.4 new features, see [Facebook Marketing API Changelog](#).

Changes from v2.3 to v2.4

Permission related changes

- Operations that reference the `attachment` object of a Post in now requires a Page access token.
- `POST /v2.4/{page_id}/objects` and `DELETE /v2.4/{object_id}` now require a Page access token with `manage_pages` and `publish_pages` permissions.
- `GET /v2.4/{page_id}/milestones`, `POST /v2.4/{milestone_id}`, and `DELETE /v2.4/{milestone_id}` now require a Page access token with `manage_pages` and `publish_pages` permission.

Changes to Pages APIs

- Calls made to the Page node `GET /v2.4/{page_id}/promotable_posts` now require a user access token with `ads_management` permission or a Page access token.
- The `global_brand_page` page object has been renamed to `global_brand_page`.
- `GET /v2.4/global_brand/default_page_insights` will now return only insights of the default Page insight data, instead of the insights for the Global Brand hierarchy. Use the Root Page ID to retrieve the integrated insights of the whole hierarchy.
- `GET/POST /v2.4/{page_id}/promotable_posts` has renamed the field `include_insights` to `include_insights`.
- The maximum limit for Page related objects is now set to `limit=100`. This will impact `GET` operations made on the `edges`, `posts`, and `promotable_posts` edges.

Post Edit History

The `edit_history` field of a Post is now available via `GET /v2.4/post_id`.

Event Ordering

The default pagination ordering of `GET /v2.4/{event_id}` now begins with the newest event first, and is ordered in reverse chronological order.

Improved Filtering

Graph API v2.4 now supports filtering of `GET /v2.4/{user_id}/accounts` with new boolean fields:

- `is_promotable` filter results by ones that can be promoted.
- `is_business` filter results associated with a Business Manager.
- `include_place` Include Place as results filter.

Declarative Fields

To try to improve performance on mobile networks, Nodes and Edges in v2.4 requires that you explicitly

request the field(s) you need for your GET requests. For example, `GET /v2.4/me/feed` no longer includes likes and comments by default, but `GET /v2.4/me/feed?fields=comments,likes` will return the data. For more details see the docs on how to request specific fields.

Deprecations in this version

2-year deprecations

- `GET /v2.3/{id}/inbox` and `GET /v2.4/{id}/inboxes` will no longer be available beginning in v2.4. As an alternative, we suggest using `GET /v2.4/{id}/feed`.
- `GET/POST /v2.4/{page_id}/fbidg-general-board-parent-page` is being deprecated in this version and replaced by `/v2.4/{page_id}/fbidg-general-board-root-id`.
- `GET/POST /v2.4/{page_id}/global_branding/branding` will no longer function in v2.4. As an alternative, please use the root page ID.
- `GET /v2.4/{page_id}/promoted_posts` will no longer support the filter and type params in v2.4. For example, a call to `GET /v2.4/{page_id}/promoted_posts?type=STATUS` will return an empty result set.
- The `Event` node no longer supports GET operations on the endpoints `/v2.4/event/{id}/invited`, `/v2.4/event/{id}/likes`, or `/v2.4/event/{id}/sharedposts`.

90-day deprecations (effective Tuesday, October 6, 2015)

- The `GET /v2.4/{user_id}/home`, `GET /v2.4/{user_id}/inbox`, and `GET /v2.4/{user_id}/notifications` operations as well as `read_stream`, `read_mailbox`, and `manage_notifications` permissions are deprecated in v2.4.
- the `user_groups` permission has been deprecated. Developers may continue to use the `user_managed_groups` permission to access the groups a person is the administrator of. This information is still accessed via the `/v2.4/{user_id}/groups` edge which is still available in v2.4.

From October 6, 2015 onwards, in all previous API versions, these endpoints will return empty arrays, the permissions will be ignored if requested in the Login Dialog, and will not be returned in calls to the `/v2.4/{page_id}/permissions` endpoint.

Next Steps

[Read Upgrade Guide \(v2.4\)](#)

March 25th, 2015 - API version 2.3

New Features

- **user_posts Permission** - We have a new permission `user_posts` that allows an app to access the posts on a person's Timeline. This includes the someone's own posts, posts they are tagged in and posts other people make on their Timeline. Previously, this content was accessible with the `read_stream` permission. The `user_posts` permission is automatically granted to anyone who previously had `read_stream` permission.
- **all_mutual_friends Edge** - This Social context edge enables apps to access the full list of mutual friends between two people who use the app. This includes mutual friends who use the

app, as well as limited information about those who don't.

Both users for whom you're calling this endpoint must have granted the `user_friends` permission.

If you calling this endpoint for someone not listed in your app's Roles section you must submit your app for review by Facebook via App Review.

Although this edge is new to Graph API v2.3, to make it easier for you to migrate we also added this edge to v2.0, v2.1, and v2.2.

- **Debug Mode** - Provides extra information about an API call in the response. This can help you debug possible problems and is now in Graph API Explorer, as well as the iOS and Android SDKs. For more information see Graph API Debug Mode.

- **New Pages Features**

- **Real-time Updates** - As of March 25, 2015 We now send content in Page real-time updates (RTUs). Previously, only the object's ID was in the RTU payload. Now we include content in addition to the ID including: statuses, posts, shares, photos, videos, milestones, likes and comments. In order for the app to receive these types of updates, you must have enabled the "Realtime Updates v2.0 Behavior" migration in your app's dashboard.

Page Reviews now support real-time updates. Apps can subscribe to the `notifications` property to receive a ping every time a public review is posted on pages the app is subscribed to. In order for the app to receive this type of update, you must have enabled the "Realtime Updates v2.0 Behavior" migration in your app's dashboard.

- **Page Posts, admin_creator** - All Page Posts now include a new `admin_creator` field that contains the ID and name of the Page Admin that created the post.

This is visible when you use a Page access token, or the user access token of a person who has a role on the Page.

- **New Page Fields** - GET `/v2.3/{page-id}` now supports fetching and updating these fields: `hours`, `food_styles`, `public_places`, `general_manager`, `status`, `culinary_team`, `restaurant_services`, `restaurant_specialties`, and `staff_info`.
- **New Page Settings** - GET `/v2.3/{page-id}/settings` now supports four new settings: `REVIEW_POLLS_BY_COUNTRY`, `COUNTRY_RESTRICTION`, `AGE_RESTRICTION`, and `PROFANE_FILTER`.

- **Videos New Features**

- **Larger Videos with Resumable Upload** - We now support larger video sizes uploads up to **1.5GB** or **45 minutes** long with resumable video upload. See Video Upload with Graph API.
- **File URL Parameter** - At all `/v2.3/{object-id}/videos` edges you can create a new Video object from the web by providing the `file_url` parameter.
- **Resumable, Chunked Upload** - All `/v2.3/{object-id}/videos` edges support resumable, chunked uploads. For more information, see Video Upload with Graph API.
- **Video Playlists** - You can now create and manage video playlists for Pages by using `POST` requests on the `/v2.3/{page-id}/video/playlist` edge. you can also add

videos to a playlist by `POST /v2.3/{video-id}/videos` and `GET` the videos of a playlist.

- **Page's Featured Video** - You can now set and get the featured video of a page using `GET POST /v2.3/{page-id}/featured-video-collection`.
- **Publish Fields** - All Video nodes objects at `/v2.3/{video-id}` now return the new fields: `published`, a boolean which indicates if the video is currently published, and `scheduled_publish_time`.
- **Custom Thumbnail** - You can now upload and manage custom video thumbnails as JPEGs or PNGs with `GET POST /v2.3/{video-id}/thumbnail`. See Graph API Reference, Video Thumbnail.
- **Targeting Restrictions** - `POST /v2.3/{page-id}/videos` now supports targeting restrictions by country, locale, age range, gender, zipcode, timezone and excluding locations.
- **Delete** - `DELETE /v2.3/{video-id}` removes videos. This is supported if you have edit permissions on the video object.
- **New Read and Write Fields** - The Video node now supports retrieving and modifying additional fields: `best_ranked_url`, and `scheduled_publish_time` and `privacy`.
- **Subtitles, Localized Captions** - `GET POST /v2.3/{video-id}` now supports supplying and retrieving subtitles and localized captions.
- **Visibility of Video** - With `POST /v2.3/{page-id}/videos` you can control where the video is seen with `no_story` and `excluded_publishing_from` parameters. These parameters target visibility on feeds and page timelines.
- For Marketing API (formerly known as Ads API) v2.3 new features, see Facebook Marketing API Changelog.

Changes from v2.2 to v2.3

- **Page Plugin** - Is the new name for Like Box Social Plugin and it has a new design.
- **Comments Plugins** Has a new design and it now supports Comment Mirroring (private beta).
- **Requests are now GameRequests** - Previously this term and object-type created confusion for non-game app developers, and the intended usage of these objects are to invite others to a game. Non-game apps should use App Invites. The `/v2.3/{profile-id}/requests` edge is now limited to game apps. See Games, Requests.
- **read_custom_friendlists** - Is the new name for `read_friendlists` Login permission. This is to clarify that the permission grants access to a person's custom friendlists, not the full list of that person's friends.
- **Changes to Page APIs:**
 - **publish_pages Permission** - This new permission is required to publish as a Page. Previously `publish_pages` was required. People who granted `publish_pages` and `publish_actions` before v2.3 have automatically been granted `publish_pages`. If anyone logs in via v2.3, you'll need to request `publish_pages` explicitly in addition to `publish_actions`.

- **Page Publish Operations** - now accept the type of access token the requests are made with. This includes publishing posts, likes and comments.

When a user access token of a Page admin is in the request such as `POST /v2.3/{page-id}/feed`, the action occurs with the voice of the user, instead of the Page. To publish as the Page, you must now use the Page access token.

- **Removing Comments on Page posts** - As a Page admin with `DELETE /v2.3/{comment-id}` now requires a Page access token.
- **POST /v2.3/{page-id}** - Now requires country as sub-parameter if you update the location field without specifying the city_id sub-parameter. The state sub-parameter is also required if country sub-parameter is 'United States'.
- **Countries** - The country subfield of the `location` field on a Page post is renamed `country_id` when you make a `POST /v2.3/{post-id}/location`.
- **Page Field Updates** - `POST /v2.3/{page-id}` - Now supports complete field updates for: hours, parking, payment_options.

Previously, the update behavior on these fields was to replace a specific key/value pair that was specified as part of the POST, leaving all other keys intact, but the new functionality of a POST on one of these fields will replace all key/value pairs with what is posted.

- **Premium Video Metrics** - Insights for Page Premium Video Posts are now deprecated.
- **Picture Error** - For the Link, Post, Thread, Comment, Status, and AppRequest nodes, and other nodes which don't have a picture, the `/v2.3/{object-id}/picture` edge now returns an error message. Before, the API returned a placeholder image of a 'question mark' for the picture edge requested on these nodes.
- **[OAuth Access Token] Format** - The response format of `https://www.facebook.com/v2.3/oauth/access_token` returned when you exchange a code for an access token now return valid JSON instead of being URL encoded. The new format of this response is `{"access_token": "ACCESS_TOKEN", "token_type": "bearer", "expires_in": 3600000}`. We made this update to be compliant with section 5.1 of RFC 6749.
- **Consistent Place Data** - Content objects tagged with a place now share a consistent place data structure which contains the ID, name the location of the place. This includes Events, Photos, Videos, Statuses and Albums. As a result, the venue and location fields have been removed from the Event node. Developers should access the place field instead.

In addition, if someone tags a Photo, Video, Status, or Album at an event, that object will contain an `event` field.

- **Serialized Empty Arrays** - All Graph API endpoints now consistently serialize empty arrays as `[]` and empty objects as `{}`. Previously, some empty objects were incorrectly serialized as empty arrays.
- **Default Result Limit** - All edges will now return 25 results per page by default when the `limit` param is not specified.
- **Ads API now Marketing API** - We recently renamed the Facebook Ads API to the Facebook Marketing API. For details on Marketing API changes see the Marketing API v2.3 Changelog.

90-day deprecations (effective Tuesday, June 23, 2015)

- **Edges and Permissions** - `/v2.0/{user-id}/interests` and `/v2.0/{user-id}/activities` edges as well as `user_interests` and `user_activities` permissions are deprecated in v2.3.

From June 23, 2015 onwards, in all previous API versions, these endpoints will return empty arrays, the permissions will be ignored if requested in the Login Dialog, and will not be returned in calls to the `/v2.0/me/permissions` endpoint.

- **Page RSS Feed endpoint** - at `https://www.facebook.com/{page-id}/page.rss` is now deprecated and will stop returning data from June 23, 2015. Developers should call the Graph API's `/v2.0/{page-id}/feed` endpoint instead. This returns JSON rather than RSS/XML.
- **Social Plugins** - The following are now deprecated and will no longer render after June 23, 2015:
 - Facepile Plugin
 - Recommendations Feed Plugin
 - Activity Feed Plugin
 - Like Box Social Plugin

October 30th, 2014 - API version 2.2**New Features**

- **Developers may now hide and unhide comments on a Page Post via the Graph API:** `POST /v2.2/{comment-id}/is_hidden` to hide, `POST /v2.2/{comment-id}/is_hidden` to unhide. You can determine if a comment is hidden, or if you have the ability to hide/unhide the comment by checking the `is_hidden` or `can_hide` fields on the comment node.
- **A new `token_for_business` field makes it easier to identify the same person across multiple apps owned by the same business:** In addition to the Business Mapping API, there is now a new `token_for_business` field on the `user` object. This emits a token which is stable for the same person across multiple apps owned by the same business. This will only be emitted if the person has logged into the app. For games developers, this property will also be emitted via the `signed_request` object passed to a canvas page on load. Note that this is not an ID - it cannot be used against the Graph API, but may be stored and used to associate the app-scoped IDs of a person across multiple apps. Also note that if the owning business changes, this token will also change. If you request this field for an app which is not associated with a business, the API call will return an error.
- **The comment node has a new object field which emits the parent object on which the comment was made.** To get the ID and owner of the comment's parent object (for example, a Page Post) you might call: `/v2.2/{comment-id}?fields=parent.{id,owner-id}`
- **The Page node has a new edge to manage subscriptions for realtime updates.**
 - In previous versions, any app which was added as a Page Tab also received realtime updates. From v2.2 onwards there is a dedicated endpoint for managing these subscriptions:
 - `GET /v2.2/{page-id}/subscriptions` returns the apps subscribed to realtime updates of the Page. This must be called with a Page Access Token.
 - `POST /v2.2/{page-id}/subscriptions` subscribes the calling app to receive

- realtime updates of the Page. This must be called with a Page Access Token and requires the calling person to have at least the Moderator role on the Page.
- `DELETE /v2.2/{page-id}/privacy_settings` stops the calling app from receiving realtime updates of the Page. This may be called with a Page or App Access Token. If called with Page Access Token, it requires the calling person to have at least the Moderator role on the Page.
- The `feed_targeting` parameter is now supported when publishing videos to a Page:** `POST /v2.2/{page-id}/videos/feed_targeting/{targeting_params}`. This lets you specify a number of parameters (such as age, location or gender) to help target who sees your content in News Feed. This functionality is already supported on `POST /v2.2/{page-id}/feed` so we're extending this to videos too.
- The Page node has a number of new writeable fields to let apps update a Page's information:** The following fields are now supported with POSTing to `POST /v2.2/{page-id}`:
 - `payment_options` takes an object which lets you specify the payment options accepted at the place.
 - `price_range` accepts an enum of strings which represent the self reported price range of the Page's business.
 - `latitude` and `longitude` can now be specified as properties of the `location` field in order to let apps programmatically update Page's physical location. Both are floats.
 - `ignore_coordinate_warnings` (boolean) determines if the API should throw an error when latitude and longitude are specified in location field for updating the Page's location. If set to false, an error will be thrown if the specified coordinates don't match with the Page's address.
 - `is_always_open` lets apps set the status of the place to "Always Open". This can only be set to true, and will clear previously specified hours in `hours` field. To set specific hours, use `hours` field.
 - `is_published` takes a boolean which lets you publish or unpublish the Page. Unpublished pages are only visible to people listed with a role on the Page.
- The Page node has a new readable field to let apps read a Page's information:** The following field are now supported with a GET to `GET /v2.2/{page-id}`:
 - `name_with_location_descriptor` returns a string which provides additional information about the Page's location besides its name.
- There's a new `APPEARS_IN_RELATED_PAGES` setting on `/v2.2/{page-id}/settings`.** This boolean determines if your page can be included in the list of suggested pages which are presented when they like a page similar to yours. You may set or read this value.
- You can now read the permissions your app has been approved for via an API.** A new edge on your App object, called `/app-id/permissions`, allows you to view the permissions that your app has been approved for via Login Review.

Changes

- There's now a limit of 50 IDs which can be specified in a single request using the syntax `ids=ID1,ID2`. This reduces the likelihood of timeouts when requesting data about a large number of IDs in a single request.
- The `blocked` edge on the Page node now requires a Page Access Token - this endpoint can no longer be called with an App or User token. That endpoint is available at `GET /v2.2/{page-id}/blocked?access_token={page-access-token}`.
- The `likes` edge on the Page node now requires a Page token for GETs. POSTs and DELETES on this endpoint already require page tokens. That endpoint is available at `POST /v2.2/{page-id}/likes/{action}/{page-access-token}`. Calling GET on this edge now works for people in the 'Analyst' role. It previously required the 'Editor' role.
- The `likes` edge on the Page node will now throw an error if the caller does not have permission. Previously it would only return an empty string.
- The `/{page-id}/admins` edge on the Page node has been renamed to `/v2.2/{page-id}/roles`. In addition, in the response, the values returned in the `role` field have been changed:

- MANAGER has been renamed to Admin.
- CONTENT_CREATOR has been renamed to Editor.
- OPERATOR has been renamed to Moderator.
- ADVERTISER has been renamed to Advertiser.
- INSTANT_ANALYST has been renamed to Analyst.
- The settings edge on the Page node will no longer include entries for settings where the value field would be null.
- POST /{page_id}/settings will no longer support the setting and value params. Instead, you should specify the setting param which should be an object containing a single key/value pair with the setting enum as the key.
- From v2.2 onwards, apps calling GET /v2.2/{page_id}/notifications must use a Page Access Token. Previously this required the manage_notifications permission. User Access Tokens will no longer work for this endpoint.
- The structure of the /v2.2/{group_id}/albums endpoint has changed to match the response of /{group_id}/albums.
- The number of results returned from the /v2.2/{id}/likes endpoint now defaults to 25.

90-day deprecations (effective Wednesday, January 28, 2015)

- The Facebook social plugin has been deprecated and will stop working on Jan 28, 2015. Developers should instead use the `getAppID` method of the Javascript SDK to retrieve the names of users.
- In versions previous to v2.2, it was possible for an app to see if a person liked the app's page by checking the page's FQL table or the `/v2.2/{id}/likes/{app_page_id}` Graph API endpoint without needing the `user_likes` permission. Starting in v2.2, the `user_likes` permission will be required to query these endpoints. Also, we will require the `user_likes` permission on versions older than v2.2 starting 90 days from today, on Jan 28, 2015. Facebook will not grant the `user_likes` permission solely for the purpose of checking if a person has liked an app's page. This change was announced on August 7, 2014 and will come into effect on November 5, 2014.
- The Pages JSON feed (e.g. <https://www.facebook.com/feeds/page.php?id=%2019292868552&format=json>) is now deprecated and will stop returning data from Jan 28, 2015 onwards. Developers should instead call the feed edge on the Graph API's Page object: `/v2.2/{page_id}/feed`.
- `POST /{page-id}/tabs` and `DELETE /{page-id}/tabs` will no longer support subscribing or unsubscribing an app for realtime updates. This will take effect in all previous API versions on January 28, 2015. To subscribe an app to realtime updates for a page, use the new `/v2.2/{page-id}/subscriptions` endpoint.
- The Comments Plugin will no longer support commenting via third-party identifiers after January 28, 2015. This facility was rarely used and the majority of comments posted by these accounts were of low quality. People may still comment using their Facebook account, or may also comment as a Facebook Page.

October 14th, 2014 - Disabled SSL 3.0 Support

On October 14, 2014, we dropped support for SSL 3.0 across Facebook properties, including the Facebook Platform API and the Real-Time Updates API, after a vulnerability in the protocol was revealed on October 14, 2014. This change helps protect people's information.

If your HTTP library forces the use of SSL 3.0 rather than TLS, you will no longer be able to connect to Facebook. Please update your libraries and/or configuration so that TLS is available.

August 7, 2014 - API version 2.1

This is Facebook's first new API update after version 2.0 was launched at the 2014 f8 conference. API versions are supported for two years after the next version is released. This means that:

- Version 2.1 will be available starting today until two years after the release of a post-v2.1 version.
- Version 2.0 will expire on August 7, 2016, two years after the release of v2.1. (Version 2.0 was introduced on April 30, 2014.)
- Version 1.0 will expire as scheduled on April 30, 2015.

New Features

- **Pages can mention other Pages when publishing via API:** When making calls to several Page publishing edges such as /feed or /photos you can now mention other Pages in a message field. This extends our current availability of mentions in Open Graph. This API requires review by Facebook before it can be used by people other than the app's developers. Learn more about the Page Mentions review process in our documentation.
- **New total friend count on the friends connection:** /v2.1/me/friends (and /v2.0/me/friends) now provides access to total friend count - this count includes friends who use the app as well as those who don't.
- **New 'facebook-api-version' HTTP header:** In all API versions, we now return an HTTP response header called 'facebook-api-version' which indicates which API version your app is actually experiencing - this may be different to the API version you specify in your request due to upgrades.
- **New App Insights API:** v2.1 includes access to the new App Insights data via an API. This is available by calling /v2.1/{app_id}/app_insights
- **A new format for Graph API Field Expansion:** v2.1 introduces more concise syntax for Field Expansion. (The new syntax is also been added to v2.0 and earlier). See our documentation on field expansion for examples. The older format for field expansion is still available, but the new format is preferred.
- **User-facing error messages:** In some cases (such as access token invalidation or expiry) the API now returns user-displayable error messages which describe the error and what the person may need to do to resolve it. These error messages will be returned in US English by default, but if you query the Graph API specifying the locale parameter (e.g. ?locale=es_ES) the string may be returned in the specified language.
- **The Event object now has five new integer fields: attending_count, declined_count, maybe_count, noreply_count and invited_count:** Each of these returns an integer which represents the number of people who have been invited, not replied, are attending, are not attending or whom may attend.
- **GET /v2.1/?id={url} returns a new URL node:** In v2.1, when you query the Graph API with a URL as the ID, we'll return a URL object which enumerates any share info available for that URL, any Open Graph object associated with that URL, or any AppLinks that use the URL.
- **The Page object now has a new screennames edge:** this returns a list of the other, non-Facebook accounts associated with the brand or entity represented by a Facebook Page.

Deprecations in this version

- **The FQL and REST APIs are no longer available in v2.1:** Previously announced with v2.0, apps must migrate to versioned Graph API calls starting with v2.1.
- **The '/insights' edge on the Application object is no longer available in this version:** This has been replaced by the new '/app_insights' edge.

90-Day Deprecations

The following deprecations will take place on November 5, 2014 - 90 days after the launch of v2.1.

- **The Recommendations Bar social plugin has been deprecated:** On Wednesday November 5th 2014, the Recommendations Bar will no longer render on any website. If you're using this plugin, we recommend you remove it from your site before this date.
- **The /insights edge on the Application object will be removed in both v1.0 and v2.0:** The insights API is classified as an Extended API and is subject to change within the life of a version. Developers should instead move to call `/v2.1/{app_id}/app_insights` before this deprecation takes effect.
- **The 'liked' property will no longer be returned in the 'signed_request' object for Page Tab apps created after today.** From November 5, 2014 onwards, the 'liked' property will always return 'true' regardless of whether or not the person has liked the page.

Changes

1. **API responses are now always JSON objects, rather than booleans, integers or strings:** Many API calls before v2.1 returned plain text 'true' or a raw number like '378293782' as the response. With v2.1, those calls will now return valid JSON, such as:

```
{
  "success": true
}
```

2. **The dialogs/oauth endpoint no longer support the 'return_session' and 'session_version' parameters** for legacy authentication methods.
3. **/v2.1/me/permissions no longer contains the 'installed' permission:** 'installed' was a pseudo-permission that was used to check if someone had your app installed. Instead of looking for 'installed' in the response, you should call the endpoint and, if it returns data, consider this indication that the user has installed the app.
4. **GET /?id={your_url} for Open Graph object and Shares has been replaced by new URL node:** Previously, when you queried the Graph API with a URL as the ID, we returned information related to shares of that URL. If the URL was also an Open Graph object, you would have to specify 'type=og' in your request. Version 2.1 introduces a new URL node which combines and replaces this functionality.
5. **/v2.1/{post-id} will now return all photos attached to the post:** In previous versions of the API only the first photo was returned with a post. This removes the need to use FQL to get all a post's photos.
6. **'uri' can no longer be requested from picture fields:** Apps previously requesting `uri` should instead use `url`.

Changes to Platform Policies

- Games which include mandatory or optional in-app charges must now disclose this in their app's description, either on Facebook or other platforms it supports. This is to give people a clear indication that your game may charge people during gameplay.
- You must not incentivize people to use social plugins or to like a Page. This includes offering rewards, or gating apps or app content based on whether or not a person has liked a Page. It remains acceptable to incentivize people to login to your app, checkin at a place or enter a promotion on your app's Page. To ensure quality connections and help businesses reach the people who matter to them, we want people to like Pages because they want to connect and

hear from the business, not because of artificial incentives. We believe this update will benefit people and advertisers alike.

These policy changes will come into effect on November 5, 2014 - 90 days after the launch of v2.1. They apply to all apps across all API versions.

April 30th, 2014 - API Version v2.0

Graph API v2.0 was introduced at the 2014 Facebook Developer Conference (f8). This changelog entry covers a large number of products and services, broken out by topic. This is the first release of Facebook's API that is versioned.

As the oldest active version of the API, unversioned calls to the Graph API will be made against this version.

Facebook Login

Version 2.0 includes a new version of Facebook Login. It has a new design that gives people more control about the info they share with your app:

- **Permissions are now optional to people using your app:** People using your app can now choose whether or not to give you the info that you request. The login dialog offers the ability to decline any of the permissions your app requests.
- **Friend list is no longer part of the default permission set and has its own permission:** Asking for access to a person's friend list is now a separate permission that your app must request. The new permission is called `user_friends`.
- **Friend list now only returns friends who also use your app:** The list of friends returned via the `/me/friends` endpoint is now limited to the list of friends that have authorized your app.
- **The default permission set called "basic info" has been removed, and replaced by "public profile":** The old default permission, called `basic_info` has been replaced by `public_profile`. `public_profile` does not include a person's friends. Specifying it as part of the initial login request is still required on iOS and Android.
- **We will review how apps use Facebook Login:** Apps requesting more than `public_profile`, `email`, and the `user_friends` permission must be reviewed by Facebook before those permissions can be requested from people. Active apps created before April 30th, 2014 have one year before they are required to go through login review, including updates to existing apps. Facebook apps created after April 30th, 2014 must go through review.

Anonymous Login (Beta)

Anonymous Login is a new product from Facebook that lets people log into your app without sharing any personal information. To learn more and apply for early access, please see our Anonymous Login product page.

Audience Network

We now provide a widget for iOS and Android that you can use to deliver high-quality, relevant ads to people using your app.

Message Dialog

Let the people using your app easily share things with their friends via private messages in Facebook Messenger, without requiring Facebook Login. The message dialog is available on iOS and Android.

App Links

App Links is an open, cross platform solution for app to app linking. App Links provides all the tools you need to expose deep links in your app or to have your app link out to others in the ecosystem.

Learn more about app links at applinks.org and how to integrate them into your app with our iOS and Android documentation.

Like Button for Mobile

We're introducing a new Like button for mobile apps, available in beta on iOS. The Like Button is the fastest way to share stories with your friends.

New PHP SDK for Facebook

We've created an all-new version of our PHP SDK that's been completely rebuilt and takes advantage of the language features of PHP 5.4 and above.

API Versions

The Graph API now supports versioning. APIs defined as Core will be supported for at least two years. Core APIs include features such as Facebook Login, the Like button, many endpoints on the Graph API, and our iOS and Android SDKs.

Parts of the API that aren't marked as Core APIs may still use migrations to modify their behaviour within a given API version. Please see our document on versions and our upgrade guide for more information.

JavaScript SDK

- **New path:** In order to support Graph API versioning and the new Facebook Login, the JS SDK must be loaded from a new path. The old location was `https://connect.facebook.net/en_US/all.js` and the new location is `https://connect.facebook.net/en_US/sdk.js`.
- **FB.init() now supports versions:** `FB.init()` takes a new parameter, `version`, that indicates what version of the API you would like to use (such as "v2.0").
- **Many parameters to FB.init() now default to false.** In particular, the `xfbml` flag.

Graph API

Changes from v1.0 to v2.0

- **App-scoped User IDs:** To better protect people's information, when people log into your app, Facebook will now issue an app-scoped ID rather than that person's original ID. However, for users that have previously logged into your app, the user ID will not change.
- **App Friends:** The `/me/friends` endpoint no longer includes the full list of a person's friends. Instead, it now returns the list of that person's friends who are also using your app.
- All requests to Graph API v2.0 require an access token, except for `/me/feed`.

- The format of the `/me/permissions` endpoint has changed. It now includes a list of permissions and a status field denoting if they were granted or declined.

New features available in v2.0

- **Taggable Friends API:** We've added a new endpoint called `/me/taggable_friends` that you can use in order to generate stories that have friends tagged in them, even those friends don't use your app. If you want to use the taggable friends API, your app will require review.
- **Invitable Friends API:** We've added a new endpoint called `/me/invitable_friends` that you can use to generate a list of friends for someone to invite to your game through a custom interface. This API is only available to apps that are games on Facebook Canvas.
- **Social Context API:** We've added a new endpoint to objects and apps that allow you to display a person's friend's actions on an object. For example, you might be able to answer the question "Which of my friends have watched this movie?" by looking at the `/movie-id?fields=context` endpoint. Or you could answer the question "Which of my friends play this game?" by looking at the `/game-app-id?fields=context` endpoint. The game app example is particularly useful for games that want to do cross-game promotions.
- **Business Mapping API:** With this release, a number of apps can be owned by a single businesses. Along with the move to emit app-scoped user IDs, we're introducing a new endpoint called `/businesses-for-business` that allows you to correlate a user's IDs across multiple apps associated with the same Business as defined within Business Manager.
- **Tagged Places API:** We're adding a new endpoint called `/me/tagged_places` that lets you access all the Places a person has been tagged at in photos, videos, statuses and links. There is a new permission associated with this endpoint: `user_tagged_places`.

Endpoints no longer available in v2.0

- `/me/connections` has been removed. Please use `/me/tagged_places` instead.
- `/me/checkins` has been removed, along with the `user_checkins` permission.
- `/me/questions` has been removed, along with the `user_questions` permission. This also includes `/page-id/questions`, `/group-id/questions`, `/question-id` and `/question-object-id`.
- `/me/subscribe` and `/me/subscribe-to` have been removed.
- `/me/username` is no longer available.
- `/me/notes` is no longer available, along with the `user_notes` permission.
- `/page-id/notes` is no longer available.
- `/video-id/questions` is no longer available.
- Public Post search is no longer available. (`/search?type=post&feedback`)
- News Feed search is no longer available (`/search/feed/lookup`)
- Start Now is no longer available in v2.0.

Permissions

Changes from v1.0 to v2.0

- In Graph API v2.0, access to `/me/friends` is no longer part of the default (`public_profile`) permissions. We now require you to ask for the new permission `user_friends`. With this permission, `/me/friends` now returns the person's friends who are also using the app.
- Apps using Facebook Login that require more than `public_profile` (default), `email` and `user_friends` will require review by Facebook in order to request these permissions from people.
- The permission `user_friends_list` no longer allows you to read the list of friends in a friendlist, but only lets you access the name of the list. This is useful for people building custom audience selectors when posting stories.
- The permissions at the `/me/permissions` endpoint now indicate if the permissions were granted or declined in the Facebook Login dialog.

New permissions in v2.0

We've added the new `public_profile` permission to replace `basic_info` as the default. `public_profile` contains much of the same information as `basic_info` did, but without the person's friends listed.

- As mentioned above, the `user_friends` permission is new in v2.0. It gives you access to the `/me/friends` endpoint, which lists the person's friends who also use your app.
- We've added a new permission called `user_tagged_places`. This gives you access to a new endpoint, `/me/tagged_places`, which replaces the deprecated `user_location` permission.

Permissions no longer available in v2.0

- `basic_info` is no longer available.
- `create_event` is no longer available.
- `manage_friendlists` is no longer available.
- `read_requests` is no longer available.
- `user_about_info` is no longer available.
- `user_photos` is no longer available.
- `user_posts_permissions` is no longer available.
- `user_permissions` is no longer available.
- `user_subscription` is no longer available.
- `user_location` is no longer available.

All `friends_*` permissions have been removed. They include:

- `friends_about_info`
- `friends_about_info_v2`
- `friends_actions_friends`
- `friends_actions_music`
- `friends_actions_reviews`
- `friends_actions_videos`
- `friends_actionsAPI_NAMEMODE`
- `friends_activities`
- `friends_birthday`
- `friends_checkins`
- `friends_education_history`
- `friends_events`
- `friends_games_activity`
- `friends_groups`
- `friends_home_video`
- `friends_interests`
- `friends_likes`
- `friends_location`
- `friends_notes`
- `friends_online_presence`
- `friends_photos`
- `friends_questions`
- `friends_relationships`
- `friends_relationship_details`
- `friends_religion_politics`
- `friends_status`
- `friends_subscription`
- `friends_videos`
- `friends_work_history`

Dialogs

- The friends dialog is no longer available.

- The registration plugin is no longer available.
- The feed and legacy share dialogs are now deprecated. They will continue to work, but we strongly recommend upgrading to the newer, modern Share dialog which additionally allows Open Graph stories to be published.
- In the feed dialog, the `to:` parameter will no longer accept arbitrary user IDs. You may only pass in the IDs of people who also use your app.

FQL

FQL is still available in version 2.0, but will not be available in the next version of the API. This early warning is given so that developers can start migrating off FQL to the Graph API as soon as possible. We strongly recommend that developers build no new experiences based on FQL. The vast majority of use cases can be achieved using the Graph API including field expansion and batched requests.

Test Apps

You can now create test versions of your production apps for use in development, testing, staging and QA. Test Apps are linked with your production app, but have their own app ID and settings. Test Apps are always in development mode. They share the same app-scoped user IDs as their production app. Admins of the production app have one place to manage all of the people who have access to the production and test apps.

Learn more in our documentation for test apps.

Business Mapping API

For businesses that operate multiple user-facing apps (for example, game developers), the Business Mapping API allows them to correlate a given user's IDs across the multiple apps operated by that business. To enable this API, developers must associate their apps with a parent business using a new tool called Business Manager. Learn about how to use the Business Mapping API and Business Manager.

Games

The following changes have been made to the app and games group API:

- **Apps Can Post as Apps** - Apps can now post to groups as apps in addition to posting on behalf of the user.
- **Create Group Dialog** - Apps can now show a client-side dialog as an alternative to creating groups server-side.
- **Join Group Dialog** - Apps can now show a client-side dialog as an alternative to adding users to a group on the server-side.
- **Add user to group by API removed** - Apps can no longer add any user to a group via API. They can only add users that have a role on the app (admins, developers, testers, test users).
- **Read Feed Removed** - Apps can no longer read a group feed. However, apps can view the posts they make via the Graph API. Apps can also comment on their posts using this same API.
- **Create event Removed** - Apps can no longer create events with the API.
- **Delete a group has changed** - Apps can only delete groups that have no members in them. If the app wants to delete a group, they must remove all members first. Deleting a group will make it non-existent.
- **Removed requirement for user_groups permission** - Apps should not ask for the `user_groups` permission to get a list of user's groups. Apps can now get a user's game groups that belong to an app (and that app only) without the permission.

- **Removed App Center requirement** - We removed the requirement for an app to be in App Center in order to use Game Groups.

Chat

The Chat/XMPP service and API was deprecated along with Graph API v1.0 on April 30, 2015.

EXHIBIT 133

REDACTED FOR PUBLIC FILING

EXHIBIT 134

REDACTED FOR PUBLIC FILING

EXHIBIT 135

REDACTED FOR PUBLIC FILING

EXHIBIT 136

REDACTED FOR PUBLIC FILING

EXHIBIT 137

REDACTED FOR PUBLIC FILING

EXHIBIT 138

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EXHIBIT 139

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EXHIBIT 140

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EXHIBIT 141

REDACTED FOR PUBLIC FILING

EXHIBIT 142

REDACTED FOR PUBLIC FILING

EXHIBIT 143

REDACTED FOR PUBLIC FILING

EXHIBIT 144

REDACTED FOR PUBLIC FILING

EXHIBIT 145

UNSEALED VERSION OF DOCUMENT PURSUANT TO THE NOVEMBER 1, 2018 ORDER

This agreement was written in English (US). To the extent any translated version of this agreement conflicts with the English version, the English version controls. Please note that Section 17 contains certain changes to the general terms for users outside the United States.

Date of Last Revision: December 11, 2012.

Statement of Rights and Responsibilities

This Statement of Rights and Responsibilities ("Statement," "Terms," or "SRR") derives from the [Facebook Principles](#), and is our terms of service that governs our relationship with users and others who interact with Facebook. By using or accessing Facebook, you agree to this Statement, as updated from time to time in accordance with Section 14 below. Additionally, you will find resources at the end of this document that help you understand how Facebook works.

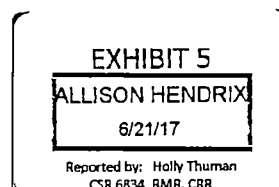
1. Privacy

Your privacy is very important to us. We designed our [Data Use Policy](#) to make important disclosures about how you can use Facebook to share with others and how we collect and can use your content and information. We encourage you to read the Data Use Policy, and to use it to help you make informed decisions.

2. Sharing Your Content and Information

You own all of the content and information you post on Facebook, and you can control how it is shared through your [privacy](#) and [application settings](#). In addition:

1. For content that is covered by intellectual property rights, like photos and videos (IP content), you specifically give us the following permission, subject to your [privacy](#) and [application settings](#): you grant us a non-exclusive, transferable, sub-licensable, royalty-free, worldwide license to use any IP content that you post on or in connection with Facebook (IP License). This IP License ends when you delete your IP content or your account unless your content has been shared with others, and they have not deleted it.
2. When you delete IP content, it is deleted in a manner similar to emptying the recycle bin on a computer. However, you understand that removed content may persist in backup copies for a reasonable period of time (but will not be available to others).
3. When you use an application, the application may ask for your permission to access your content and information as well as content and information that others have shared with you. We require applications to respect your privacy, and your agreement with that application will control how the application can use, store, and transfer that content and information. (To learn more about Platform, including how you can control what information other people may share with applications, read our [Data Use Policy](#) and [Platform Page](#).)



4. When you publish content or information using the Public setting, it means that you are allowing everyone, including people off of Facebook, to access and use that information, and to associate it with you (i.e., your name and profile picture).
5. We always appreciate your feedback or other suggestions about Facebook, but you understand that we may use them without any obligation to compensate you for them (just as you have no obligation to offer them).

3. Safety

We do our best to keep Facebook safe, but we cannot guarantee it. We need your help to keep Facebook safe, which includes the following commitments by you:

1. You will not post unauthorized commercial communications (such as spam) on Facebook.
2. You will not collect users' content or information, or otherwise access Facebook, using automated means (such as harvesting bots, robots, spiders, or scrapers) without our prior permission.
3. You will not engage in unlawful multi-level marketing, such as a pyramid scheme, on Facebook.
4. You will not upload viruses or other malicious code.
5. You will not solicit login information or access an account belonging to someone else.
6. You will not bully, intimidate, or harass any user.
7. You will not post content that: is hate speech, threatening, or pornographic; incites violence; or contains nudity or graphic or gratuitous violence.
8. You will not develop or operate a third-party application containing alcohol-related, dating or other mature content (including advertisements) without appropriate age-based restrictions.
9. You will follow our [Promotions Guidelines](#) and all applicable laws if you publicize or offer any contest, giveaway, or sweepstakes ("promotion") on Facebook.
10. You will not use Facebook to do anything unlawful, misleading, malicious, or discriminatory.
11. You will not do anything that could disable, overburden, or impair the proper working or appearance of Facebook, such as a denial of service attack or interference with page rendering or other Facebook functionality.
12. You will not facilitate or encourage any violations of this Statement or our policies.

4. Registration and Account Security

Facebook users provide their real names and information, and we need your help to keep it that way. Here are some commitments you make to us relating to registering and maintaining the security of your account:

1. You will not provide any false personal information on Facebook, or create an account for anyone other than yourself without permission.
2. You will not create more than one personal account.
3. If we disable your account, you will not create another one without our permission.
4. You will not use your personal timeline primarily for your own commercial gain, and will

use a Facebook Page for such purposes.

5. You will not use Facebook if you are under 13.
6. You will not use Facebook if you are a convicted sex offender.
7. You will keep your contact information accurate and up-to-date.
8. You will not share your password (or in the case of developers, your secret key), let anyone else access your account, or do anything else that might jeopardize the security of your account.
9. You will not transfer your account (including any Page or application you administer) to anyone without first getting our written permission.
10. If you select a username or similar identifier for your account or Page, we reserve the right to remove or reclaim it if we believe it is appropriate (such as when a trademark owner complains about a username that does not closely relate to a user's actual name).

5. Protecting Other People's Rights

We respect other people's rights, and expect you to do the same.

1. You will not post content or take any action on Facebook that infringes or violates someone else's rights or otherwise violates the law.
2. We can remove any content or information you post on Facebook if we believe that it violates this Statement or our policies.
3. We provide you with tools to help you protect your intellectual property rights. To learn more, visit our [How to Report Claims of Intellectual Property Infringement](#) page.
4. If we remove your content for infringing someone else's copyright, and you believe we removed it by mistake, we will provide you with an opportunity to appeal.
5. If you repeatedly infringe other people's intellectual property rights, we will disable your account when appropriate.
6. You will not use our copyrights or trademarks (including Facebook, the Facebook and F Logos, FB, Face, Poke, Book and Wall), or any confusingly similar marks, except as expressly permitted by our Brand Usage Guidelines or with our prior written permission.
7. If you collect information from users, you will: obtain their consent, make it clear you (and not Facebook) are the one collecting their information, and post a privacy policy explaining what information you collect and how you will use it.
8. You will not post anyone's identification documents or sensitive financial information on Facebook.
9. You will not tag users or send email invitations to non-users without their consent. Facebook offers social reporting tools to enable users to provide feedback about tagging.

6. Mobile and Other Devices

1. We currently provide our mobile services for free, but please be aware that your carrier's normal rates and fees, such as text messaging fees, will still apply.
2. In the event you change or deactivate your mobile telephone number, you will update your account information on Facebook within 48 hours to ensure that your messages are not sent to the person who acquires your old number.

3. You provide consent and all rights necessary to enable users to sync (including through an application) their devices with any information that is visible to them on Facebook.

7. Payments

If you make a payment on Facebook or use Facebook Credits, you agree to our [Payments Terms](#).

8. Special Provisions Applicable to Social Plugins

If you include our Social Plugins, such as the Share or Like buttons on your website, the following additional terms apply to you:

1. We give you permission to use Facebook's Social Plugins so that users can post links or content from your website on Facebook.
2. You give us permission to use and allow others to use such links and content on Facebook.
3. You will not place a Social Plugin on any page containing content that would violate this Statement if posted on Facebook.

9. Special Provisions Applicable to Developers/Operators of Applications and Websites

If you are a developer or operator of a Platform application or website, the following additional terms apply to you:

1. You are responsible for your application and its content and all uses you make of Platform. This includes ensuring your application or use of Platform meets our [Facebook Platform Policies](#) and our [Advertising Guidelines](#).
2. Your access to and use of data you receive from Facebook, will be limited as follows:
 1. You will only request data you need to operate your application.
 2. You will have a privacy policy that tells users what user data you are going to use and how you will use, display, share, or transfer that data and you will include your privacy policy URL in the [Developer Application](#).
 3. You will not use, display, share, or transfer a user's data in a manner inconsistent with your privacy policy.
 4. You will delete all data you receive from us concerning a user if the user asks you to do so, and will provide a mechanism for users to make such a request.
 5. You will not include data you receive from us concerning a user in any advertising creative.
 6. You will not directly or indirectly transfer any data you receive from us to (or use such data in connection with) any ad network, ad exchange, data broker, or other advertising related toolset, even if a user consents to that transfer or use.
 7. You will not sell user data. If you are acquired by or merge with a third party, you can continue to use user data within your application, but you cannot transfer user data outside of your application.

8. We can require you to delete user data if you use it in a way that we determine is inconsistent with users' expectations.
9. We can limit your access to data.
10. You will comply with all other restrictions contained in our Facebook Platform Policies.
3. You will not give us information that you independently collect from a user or a user's content without that user's consent.
4. You will make it easy for users to remove or disconnect from your application.
5. You will make it easy for users to contact you. We can also share your email address with users and others claiming that you have infringed or otherwise violated their rights.
6. You will provide customer support for your application.
7. You will not show third party ads or web search boxes on www.facebook.com.
8. We give you all rights necessary to use the code, APIs, data, and tools you receive from us.
9. You will not sell, transfer, or sublicense our code, APIs, or tools to anyone.
10. You will not misrepresent your relationship with Facebook to others.
11. You may use the logos we make available to developers or issue a press release or other public statement so long as you follow our Facebook Platform Policies.
12. We can issue a press release describing our relationship with you.
13. You will comply with all applicable laws. In particular you will (if applicable):
 1. have a policy for removing infringing content and terminating repeat infringers that complies with the Digital Millennium Copyright Act.
 2. comply with the Video Privacy Protection Act (VPPA), and obtain any opt-in consent necessary from users so that user data subject to the VPPA may be shared on Facebook. You represent that any disclosure to us will not be incidental to the ordinary course of your business.
14. We do not guarantee that Platform will always be free.
15. You give us all rights necessary to enable your application to work with Facebook, including the right to incorporate content and information you provide to us into streams, timelines, and user action stories.
16. You give us the right to link to or frame your application, and place content, including ads, around your application.
17. We can analyze your application, content, and data for any purpose, including commercial (such as for targeting the delivery of advertisements and indexing content for search).
18. To ensure your application is safe for users, we can audit it.
19. We can create applications that offer similar features and services to, or otherwise compete with, your application.

10. About Advertisements and Other Commercial Content Served or Enhanced by Facebook

Our goal is to deliver ads and commercial content that are valuable to our users and advertisers. In order to help us do that, you agree to the following:

1. You can use your privacy settings to limit how your name and profile picture may be associated with commercial, sponsored, or related content (such as a brand you like)

served or enhanced by us. You give us permission to use your name and profile picture in connection with that content, subject to the limits you place.

2. We do not give your content or information to advertisers without your consent.
3. You understand that we may not always identify paid services and communications as such.

11. Special Provisions Applicable to Advertisers

You can target your desired audience by buying ads on Facebook or our publisher network. The following additional terms apply to you if you place an order through our online advertising portal (Order):

1. When you place an Order, you will tell us the type of advertising you want to buy, the amount you want to spend, and your bid. If we accept your Order, we will deliver your ads as inventory becomes available. When serving your ad, we do our best to deliver the ads to the audience you specify, although we cannot guarantee in every instance that your ad will reach its intended target.
2. In instances where we believe doing so will enhance the effectiveness of your advertising campaign, we may broaden the targeting criteria you specify.
3. You will pay for your Orders in accordance with our Payments Terms. The amount you owe will be calculated based on our tracking mechanisms.
4. Your ads will comply with our Advertising Guidelines.
5. We will determine the size, placement, and positioning of your ads.
6. We do not guarantee the activity that your ads will receive, such as the number of clicks your ads will get.
7. We cannot control how clicks are generated on your ads. We have systems that attempt to detect and filter certain click activity, but we are not responsible for click fraud, technological issues, or other potentially invalid click activity that may affect the cost of running ads.
8. You can cancel your Order at any time through our online portal, but it may take up to 24 hours before the ad stops running. You are responsible for paying for all ads that run.
9. Our license to run your ad will end when we have completed your Order. You understand, however, that if users have interacted with your ad, your ad may remain until the users delete it.
10. We can use your ads and related content and information for marketing or promotional purposes.
11. You will not issue any press release or make public statements about your relationship with Facebook without our prior written permission.
12. We may reject or remove any ad for any reason.
13. If you are placing ads on someone else's behalf, you must have permission to place those ads, including the following:
 1. You warrant that you have the legal authority to bind the advertiser to this Statement.
 2. You agree that if the advertiser you represent violates this Statement, we may hold you responsible for that violation.

12. Special Provisions Applicable to Pages

If you create or administer a Page on Facebook, or run a promotion or an offer from your Page, you agree to our [Pages Terms](#).

13. Special Provisions Applicable to Software

1. If you download our software, such as a stand-alone software product or a browser plugin, you agree that from time to time, the software may download upgrades, updates and additional features from us in order to improve, enhance and further develop the software.
2. You will not modify, create derivative works of, decompile or otherwise attempt to extract source code from us, unless you are expressly permitted to do so under an open source license or we give you express written permission.

14. Amendments

1. Unless we make a change for legal or administrative reasons, or to correct an inaccurate statement, we will provide you with seven (7) days notice (for example, by posting the change on the [Facebook Site Governance Page](#)) and an opportunity to comment on changes to this Statement. You can also visit our [Facebook Site Governance Page](#) and "like" the Page to get updates about changes to this Statement.
2. If we make changes to policies referenced in or incorporated by this Statement, we may provide notice on the Site Governance Page.
3. Your continued use of Facebook following changes to our terms constitutes your acceptance of our amended terms.

15. Termination

If you violate the letter or spirit of this Statement, or otherwise create risk or possible legal exposure for us, we can stop providing all or part of Facebook to you. We will notify you by email or at the next time you attempt to access your account. You may also delete your account or disable your application at any time. In all such cases, this Statement shall terminate, but the following provisions will still apply: 2.2, 2.4, 3-5, 8.2, 9.1-9.3, 9.9, 9.10, 9.13, 9.15, 9.18, 10.3, 11.2, 11.5, 11.6, 11.9, 11.12, 11.13, and 15-19.

16. Disputes

1. You will resolve any claim, cause of action or dispute (claim) you have with us arising out of or relating to this Statement or Facebook exclusively in a state or federal court located in Santa Clara County. The laws of the State of California will govern this Statement, as well as any claim that might arise between you and us, without regard to

- conflict of law provisions. You agree to submit to the personal jurisdiction of the courts located in Santa Clara County, California for the purpose of litigating all such claims.
2. If anyone brings a claim against us related to your actions, content or information on Facebook, you will indemnify and hold us harmless from and against all damages, losses, and expenses of any kind (including reasonable legal fees and costs) related to such claim. Although we provide rules for user conduct, we do not control or direct users' actions on Facebook and are not responsible for the content or information users transmit or share on Facebook. We are not responsible for any offensive, inappropriate, obscene, unlawful or otherwise objectionable content or information you may encounter on Facebook. We are not responsible for the conduct, whether online or offline, or any user of Facebook.
 3. WE TRY TO KEEP FACEBOOK UP, BUG-FREE, AND SAFE, BUT YOU USE IT AT YOUR OWN RISK. WE ARE PROVIDING FACEBOOK AS IS WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. WE DO NOT GUARANTEE THAT FACEBOOK WILL ALWAYS BE SAFE, SECURE OR ERROR-FREE OR THAT FACEBOOK WILL ALWAYS FUNCTION WITHOUT DISRUPTIONS, DELAYS OR IMPERFECTIONS. FACEBOOK IS NOT RESPONSIBLE FOR THE ACTIONS, CONTENT, INFORMATION, OR DATA OF THIRD PARTIES, AND YOU RELEASE US, OUR DIRECTORS, OFFICERS, EMPLOYEES, AND AGENTS FROM ANY CLAIMS AND DAMAGES, KNOWN AND UNKNOWN, ARISING OUT OF OR IN ANY WAY CONNECTED WITH ANY CLAIM YOU HAVE AGAINST ANY SUCH THIRD PARTIES. IF YOU ARE A CALIFORNIA RESIDENT, YOU WAIVE CALIFORNIA CIVIL CODE §1542, WHICH SAYS: A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR. WE WILL NOT BE LIABLE TO YOU FOR ANY LOST PROFITS OR OTHER CONSEQUENTIAL, SPECIAL, INDIRECT, OR INCIDENTAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THIS STATEMENT OR FACEBOOK, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. OUR AGGREGATE LIABILITY ARISING OUT OF THIS STATEMENT OR FACEBOOK WILL NOT EXCEED THE GREATER OF ONE HUNDRED DOLLARS (\$100) OR THE AMOUNT YOU HAVE PAID US IN THE PAST TWELVE MONTHS. APPLICABLE LAW MAY NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY OR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. IN SUCH CASES, FACEBOOK'S LIABILITY WILL BE LIMITED TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW.

17. Special Provisions Applicable to Users Outside the United States

We strive to create a global community with consistent standards for everyone, but we also strive to respect local laws. The following provisions apply to users and non-users who interact

with Facebook outside the United States:

1. You consent to having your personal data transferred to and processed in the United States.
2. If you are located in a country embargoed by the United States, or are on the U.S. Treasury Department's list of Specially Designated Nationals you will not engage in commercial activities on Facebook (such as advertising or payments) or operate a Platform application or website.
3. Certain specific terms that apply only for German users are available [here](#).

18. Definitions

1. By "Facebook" we mean the features and services we make available, including through (a) our website at www.facebook.com and any other Facebook branded or co-branded websites (including sub-domains, international versions, widgets, and mobile versions); (b) our Platform; (c) social plugins such as the Like button, the Share button and other similar offerings and (d) other media, software (such as a toolbar), devices, or networks now existing or later developed.
2. By "Platform" we mean a set of APIs and services (such as content) that enable others, including application developers and website operators, to retrieve data from Facebook or provide data to us.
3. By "information" we mean facts and other information about you, including actions taken by users and non-users who interact with Facebook.
4. By "content" we mean anything you or other users post on Facebook that would not be included in the definition of information.
5. By "data" or "user data" or "user's data" we mean any data, including a user's content or information that you or third parties can retrieve from Facebook or provide to Facebook through Platform.
6. By "post" we mean post on Facebook or otherwise make available by using Facebook.
7. By "use" we mean use, copy, publicly perform or display, distribute, modify, translate, and create derivative works of.
8. By "active registered user" we mean a user who has logged into Facebook at least once in the previous 30 days.
9. By "application" we mean any application or website that uses or accesses Platform, as well as anything else that receives or has received data from us. If you no longer access Platform but have not deleted all data from us, the term application will apply until you delete the data.

19. Other

1. If you are a resident of or have your principal place of business in the US or Canada, this Statement is an agreement between you and Facebook, Inc. Otherwise, this Statement is an agreement between you and Facebook Ireland Limited. References to "us," "we," and "our" mean either Facebook, Inc. or Facebook Ireland Limited, as appropriate.
2. This Statement makes up the entire agreement between the parties regarding Facebook, and supersedes any prior agreements.

3. If any portion of this Statement is found to be unenforceable, the remaining portion will remain in full force and effect.
4. If we fail to enforce any of this Statement, it will not be considered a waiver.
5. Any amendment to or waiver of this Statement must be made in writing and signed by us.
6. You will not transfer any of your rights or obligations under this Statement to anyone else without our consent.
7. All of our rights and obligations under this Statement are freely assignable by us in connection with a merger, acquisition, or sale of assets, or by operation of law or otherwise.
8. Nothing in this Statement shall prevent us from complying with the law.
9. This Statement does not confer any third party beneficiary rights.
10. We reserve all rights not expressly granted to you.
11. You will comply with all applicable laws when using or accessing Facebook.

You may also want to review the following documents, which provide additional information about your use of Facebook:

- Data Use Policy: The Data Use Policy contains information to help you understand how we collect and use information.
- Payment Terms: These additional terms apply to all payments made on or through Facebook.
- Platform Page: This page helps you better understand what happens when you add a third-party application or use Facebook Connect, including how they may access and use your data.
- Facebook Platform Policies: These guidelines outline the policies that apply to applications, including Connect sites.
- Advertising Guidelines: These guidelines outline the policies that apply to advertisements placed on Facebook.
- Promotions Guidelines: These guidelines outline the policies that apply if you offer contests, sweepstakes, and other types of promotions on Facebook.
- Brand Permissions Center: These guidelines outline the policies that apply to use of Facebook trademarks, logos and screenshots.
- How to Report Claims of Intellectual Property Infringement
- Pages Terms: These guidelines apply to your use of Facebook Pages.
- Community Standards: These guidelines outline our expectations regarding the content you post to Facebook and your activity on Facebook.

To access the Statement of Rights and Responsibilities in several different languages, change the language setting for your Facebook session by clicking on the language link in the left corner of most pages. If the Statement is not available in the language you select, we will default to the English version.

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f8 Event and Facebook Platform FAQ

What is f8?

f8 was an event held at the San Francisco Design Center on May 24, 2007, during which Mark Zuckerberg unveiled the next evolution of Facebook Platform. The event included an eight-hour "hackathon," where both Facebook engineers and outside developers collaborated on building new applications on the new Facebook Platform.

What is a "hackathon"?

A hackathon is an all-night coding event during which Facebook engineers work on any project that interests them. Facebook uses the word "hackathon" to refer to a gathering of engineers, who possess technical expertise and collaborate on innovative projects. Facebook has a tradition of holding frequent developer hackathons, which have spawned some of the most popular features and applications on the site.

What is Facebook Platform?

Facebook Platform is a development system that enables companies and developers to build applications for the Facebook website, where all of Facebook's 24 million active users can interact with them. Facebook Platform offers deep integration into the Facebook website, distribution through the social graph and an opportunity to build a business.

What is the social graph?

The social graph is at the core of Facebook. It is the network of connections and relationships between people on Facebook and enables the efficient spreading and filtering of information. Just as people share information with their friends and the people around them in the real world, these connections are reflected online in the Facebook social graph.

What is a Facebook application?

A Facebook application uses Facebook Platform to access information from the social graph, offering users an experience that's relevant to them. Facebook applications can plug into the Facebook website in a number of ways: applications can be embedded on users' profile pages, reside on their own separate pages (called "canvas" pages), or live through desktop applications using data from the Facebook social graph.

What's new in Facebook Platform?

We've been adding functionality since Facebook Platform first shipped in beta in August 2006. With the latest evolution of Facebook Platform however, third-party developers can now create applications on the Facebook site with the same level of integration as applications built by internal Facebook developers. Now developers everywhere have the ability to create Facebook applications that deeply integrate into the Facebook site, as well as the potential for mass distribution through the social graph and new business opportunities.

Why did Facebook launch Facebook Platform?

Our engineers have created great applications for Facebook, but we recognized that third-party developers can help us make Facebook an even more powerful social utility. Facebook Platform gives developers everywhere the tools to create applications that we just wouldn't have the resources to build in-house, and those applications make Facebook an even better way for our users to exchange information. Developers also benefit from Facebook Platform as it gives them the potential to broadly distribute their applications and even build new business opportunities.

What kinds of applications can be built on Facebook Platform?

The kinds of applications developers can build on Facebook Platform are limited only by their imaginations. Because applications are based on the Facebook social graph they can be more relevant to users, keeping people in touch with what and whom they care about. We've already seen a variety of applications built by our developer partners, including those for sharing media files, book reviews, slideshows and more. Some of the



possibilities of Facebook applications are illustrated in the Facebook Platform Application Directory, available at <http://www.facebook.com/apps>.

Are there any restrictions on what developers can build?

Developers are encouraged to exercise their creativity when building applications. Of course, all applications are subject to the Terms of Service that every developer agrees to, which include basic requirements such as not storing any sensitive user information, not creating any offensive or illegal applications, and not building anything that phishes or spams users. And users will always have the power to report any applications that compromise Facebook's trusted environment, keeping our users' information safe.

What are the benefits of Facebook Platform for users?

With Facebook Platform, users gain the ability to define their experience on Facebook by choosing applications that are useful and relevant to them. Now that they have access to a virtually limitless set of applications from outside developers, users have an unprecedented amount of choice. They can share information and communicate with their trusted connections in ways that would never have been possible before Facebook opened its platform.

How do users add applications to and remove applications from their account?

If a user sees an application she likes on a friend's profile, she can add it to her account by clicking the "Add" link on the application's profile box. She can also add new applications by navigating to the application's specific page in the Facebook Platform Application Directory and clicking "Add Application" in the top-right corner. To remove an application, she first clicks "Applications" on the left navigation bar. From there, she can "Remove" any of the applications in her account, whether they are built by a developer partner or by Facebook.

What are the privacy controls for Facebook Platform, and what kind of user information can be shared?

On Facebook, users are always in control of their information and can choose how much of their information is made available to specific applications. With Facebook Platform, we're offering additional privacy controls and requiring that third parties treat user information with the same respect we do—and our users have come to expect. Users can also choose to completely opt out of making their data available through Facebook Platform. Applications can never violate users' basic privacy settings and are meant to provide users with a better opportunity to share their information with their friends and networks.

What do third-party applications do with user information?

Applications built by third parties are required to respect Facebook users' privacy preferences. Third-party applications allow users and their friends to share information in new ways, without affecting the security and privacy that they've always enjoyed on Facebook.

How many applications are there for Facebook Platform?

At f8, we are launching with over 85 applications from more than 65 developer partners, and that's only the beginning. We're encouraging interested developers everywhere to create Facebook applications. We have no limits on the number of applications that can be created.

What differentiates Facebook applications from widgets on other sites?

Facebook applications are deeply integrated into the site and take advantage of the network of real connections through which users share information and communicate—what we call the "social graph." Widgets are typically single-purpose Flash add-ons to a web page (i.e., displaying a single video) that are not fully integrated into a site nor are aware of the social context among users.

How will Facebook maintain its minimalist style if users can add and move applications around on their profile?

We're giving our users the choice to add applications and control their placement in their profiles, but we're not changing the essential layout and familiar style of the Facebook site. Facebook applications are focused on providing new ways to spread information on Facebook, not about redesigning the way a profile looks. For example, users will not be able to change the site background, add music that plays when their profiles load, or



insert animation into their profiles. Individual applications may play media, music or animations but only when a visitor to that profile interacts with them.

How will Facebook deal with applications that compete with one another or even compete with Facebook-built applications?

We welcome developers with competing applications, including developers whose applications might compete with Facebook-built applications. Many applications are likely to offer similar features. We've designed Facebook Platform so that applications from third-party developers are on a level playing field with applications built by Facebook. Ultimately, our users will decide which applications they find most useful, and it is these applications that will become the most popular.

How will Facebook monetize Facebook Platform?

All the great applications built by our developer partners provide a service to our users and strengthen the social graph. The result is even more engaged Facebook users creating more advertising opportunities.

Can Facebook applications include ads?

We want to enable developers to build a business on their Facebook applications, so we're giving developers the freedom to monetize their applications as they like. Developers can include advertising on their applications' canvas pages, though no advertising will be allowed within the application boxes that appear within user profiles.

Are you going to share revenue with developers?

While revenue sharing is not available at launch, we are looking into ways to share advertising revenue with developers. This version of Facebook Platform already lets developers monetize their applications as they like, whether they choose to offer it for free or build a business on their application.

What are the key technical elements of Facebook Platform?

Facebook Platform offers several technologies that help developers use data from the social graph. In addition to the Facebook API, this recently launched version of Facebook Platform introduces Facebook Markup Language (FBML), which enables developers to build applications that deeply integrate into the Facebook site. Facebook Platform also includes Facebook Query Language (FQL), which lets developers use a SQL-style interface to query the data they can access through the API.

For more details on the technology behind Facebook Platform, check out the Facebook Developer site at <http://developers.facebook.com>.

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From: Georgia Fojo </O=THEFACEBOOK/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=GFOJO766>
Sent: Monday, April 07, 2014 1:06 PM
To: Georgia Fojo
Subject: AFTERNOON NEWS CLIPS-4.7.14

AFTERNOON NEWS CLIPS-4.7.14

MUST READ:

Facebook Courts Developers with New Approach to Platform
The Information//Eric Newcomer

When Facebook convenes its first developer conference in three years later this month, the social networking giant will be aiming to draw software makers closer to its booming mobile business—and convince them that it has learned from its often-troubled efforts to serve as a platform for third-party developers.

<https://www.theinformation.com/Facebook-Courts-Developers-with-New-Approach-to-Platform>

FACEBOOK RELATED:

Forget Dating Sites, Try Facebook Instead To Find the One
TIME//Alice Park

Online dating can be so stressful – filling out the profile and keeping up with all the interactions can feel like a job – so it's no surprise that sometimes digital romance blooms under more Facebook friend-ly circumstances.

<http://time.com/50402/facebook-the-new-marriage-matchmaker/>

Facebook Wants to Turn 25 Million Small Businesses Into Advertisers
Ad Age//Cotton Delo

After years of courting the nation's biggest advertisers, Facebook is going after the 99%. That figure represents the long tail of advertisers; the plumbers and dentists, restaurants and political candidates, app developers and direct-response advertisers. These small and mid-sized businesses don't have Facebook account reps and are left to figure out Facebook advertising for themselves.

<http://adage.com/article/digital/facebook-turn-small-businesses-advertisers/292495/>

Algorithm Predicts Which Photos Will Go Viral On Facebook
Social News Daily//Megan Charles

Stanford University researchers have developed a computer algorithm that can predict which photos will likely go viral on Facebook.

http://socialnewsdaily.com/34532/algorithm-predicts-which-photos-will-go-viral-on-facebook/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+SocialNewsDaily+%28Social+News+Daily%29

Salt Lake Mom Monitoring Facebook Helped Thwart Teen Shooting, Police Say
Deseret News//Pat Reavy

A planned shooting near West High School involving a student was thwarted late last week thanks to a mother keeping an eye on her son's Facebook page, according to police.

<http://www.deseretnews.com/article/865600418/Salt-Lake-mom-monitoring-Facebook-helped-thwart-teen-shooting-police-say.html>

INSTAGRAM RELATED:

Instagram Helps Launch Careers of Local Talents
Arab News//Sultan Al-Sughair

Instagram has opened the door to many young talents and has enabled them to break the barriers of their own countries to reach various countries worldwide by sharing photographs of their work.

<http://www.arabnews.com/news/551776>

BUSINESS:

Twitter Acquires Android Lockscreen App Cover, Moves Deeper Into Mobile Services
TechCrunch//Ingrid Lunden

A very interesting acquisition announcement from Twitter today: it's buying Cover, an Android lockscreen app that lets you customise what apps you see and when. For now, Cover will remain live in the Play store.

<http://techcrunch.com/2014/04/07/twitter-acquires-android-lockscreen-app-cover-moves-deeper-into-mobile-services/>

Andromeda: Google's Secret Weapon To Keep Amazon And Microsoft On Their Toes

Readwrite//Jodi Mardesich

Google Compute Engine, the version of Google's infrastructure it rents out to developers, is getting access to Andromeda, a set of technologies the company uses to speed up its own networking. Last week, it turned Andromeda on in two of its four Compute Engine zones this week.

<http://readwrite.com/2014/04/07/andromeda-google-software-defined-networking#awesm=~oAMbFVse3EewF>

E-Learning Platform Lynda.com Buys Compilr To Add In-Browser Coding Tools, Price Around \$20M

TechCrunch//Ingrid Lunden

Lynda.com, the online education platform that raised its first and only round of \$103 million about a year ago, is today announcing an acquisition that will further Lynda.com's reach with developers and expand the kinds of services it can offer to users.

<http://techcrunch.com/2014/04/07/e-learning-platform-lynda-com-buys-compilr-to-add-in-browser-coding-tools-price-around-20m/>

POLICY//POLITICAL:

High Court Won't Take Up NSA Case

The Hill//Julian Hatttem

The Supreme Court on Monday declined an initial challenge to the National Security Agency's (NSA) bulk collection of information about the public's telephone calls.

<http://thehill.com/blogs/hillicon-valley/technology/202809-high-court-wont-take-up-nsa-case>

GOP Bill Keeps US Internet Control

The Hill//Peter Kasperowicz

Rep. Sean Duffy (R-Wis.) has proposed legislation that would block the federal government from handing over control of the Internet management system.

<http://thehill.com/blogs/floor-action/technology/202811-gop-bill-prevents-us-from-giving-up-internet-control>

INTERNATIONAL:

Google Appeals Ongoing YouTube Blockade in Turkey

RT//Staff Writer

US internet giant Google has gone to Turkey's Constitutional Court to appeal the government's decision to block its video file sharing service YouTube. The ban, which had been imposed before local elections, has been upheld by a local court ruling.

<http://rt.com/news/google-appeals-youtube-turkey-929/>

WhatsApp, E-Plus Launch A €10 SIM In Germany With Free WhatsApp Usage Included

TechCrunch//Ingrid Lunden

Back in February, Jan Koum, CEO of Facebook-owned WhatsApp, hinted that the company would soon be unveiling a new way of working with carriers, first in Germany, with special tariffs to access the app. Today that deal is now live. E-Plus now sells a prepaid SIM that gives users unlimited access to WhatsApp outside of their data plans.

<http://techcrunch.com/2014/04/07/whatsapp-launches-a-e10-sim-with-e-plus-in-germany-with-free-whatsapp-usage-included/>

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FULL TEXT ARTICLES

MUST READ:

Facebook Courts Developers with New Approach to Platform

The Information//Eric Newcomer

When Facebook convenes its first developer conference in three years later this month, the social networking giant will be aiming to draw software makers closer to its booming mobile business—and convince them that it has learned from its often-troubled efforts to serve as a platform for third-party developers.

Facebook's new approach to partnerships stresses ever-improving tools that allow software developers—especially those building mobile applications—to tap into the company's identity services and much-touted "social graf." By having people log-in via Facebook and allow access to their Facebook profiles, software makers can learn a lot about customers' friends and interests and improve their offerings accordingly.

Ilya Sukhar, founder of an app-services provider called Parse that was acquired by Facebook last year, was a key organizer of the upcoming event, signaling the importance the company attaches to the mobile analytics and notification tools that Parse provides. Some developers expect the

company to announce deeper integration of Parse into Facebook's own products for developers, such as its payments system and its advertising services.

Facebook's platform goals are in some respects more modest than they were five or seven years ago, when many game developers and others leaped at the chance to build products and businesses that were fully integrated into Facebook. The social network had positioned itself as a universe unto itself that had everything a third-party developer needed to build a business. Most importantly, it offered the chance to attract customers quickly and cheaply through automated notifications and invitations to friends.

Facebook-centric companies such as social gaming firm Zynga enjoyed exponential growth for a time. But Facebook ultimately left many partners feeling burned when it changed its algorithms to cut down on social spam and all but eviscerated many third-party apps in the process.

Now Facebook aims to be less an all-encompassing Web environment than a vendor of unique tools and advertising services, especially for the mobile world. With 53% of its ad revenue now coming from mobile, Facebook needs close relationships with mobile app developers. But without a mobile phone operating system of its own, Facebook has to earn those relationships with more than a promise of a large audience.

Game-makers and other mobile app developers are already among Facebook's best mobile advertising customers. Facebook in turn has become a critical vehicle for getting people to install news apps on their phones—and use them regularly.

The Power of Login

Facebook has said little about what new products or services might debut at F8, which will feature a keynote from CEO Mark Zuckerberg and about 20 sessions, including tracks on building, growing and monetizing apps. But developers are clear on what they see as the priorities.

One key item is Facebook Login, which can be used to connect apps to data and personal information on the Facebook platform. It's the tool that enables the Nike+ Running app to send information on a customer's athletic accomplishments to their Facebook feed, for example, or lets patrons of Goodreads share what books they've read. Of the top 100 grossing iPhone applications in the U.S., 81 offer Facebook Login, according to Facebook. (On Android it's 62 out of 100.)

But even though Facebook Login provides more information about customers than similar services offered by Twitter and Google, developers say that many people are reluctant to log in with Facebook's tool because they worry that the apps will post directly to their feeds or otherwise interact with their Facebook friends in unpredictable ways.

That can be a problem for app developers, many of whom prefer that people use Facebook Login because Facebook ad campaigns work much better when they do.

Now Facebook aims to be less an all-encompassing Web environment than a vendor of unique tools and advertising services, especially for the mobile world.

A Facebook spokeswoman said the company has already made moves to improve the percentage of app users who log in using Facebook's tool.

"In 2013, we started requiring apps to ask permission before posting on behalf of people back to Facebook," a Facebook spokeswoman wrote in an email. "By splitting this authorization process into two distinct pieces, we aimed to tackle the problem of social spam and surprise that came from people not understanding they were agreeing to share back to Facebook."

Parse is will also be a big topic. The service lets app developers send notifications to their users urging them to keep using their application, for example. Parse also offers to tools that let developers save data in the cloud, integrate third party login tools to their apps and analyze their users behavior.

App developers are expecting a lot of discussion of advertising as well. Facebook mobile ads have proven very effective for driving app downloads in particular, but the most desirable inventory is scarce as app-makers chase the same small set of money-spending customers.

"I think they're going to talk a lot about their ad network that they're going to be developing," says Chris DeWolfe, CEO of SGN, though he doesn't have an inside view on the company's thinking.

Right now, Facebook sells ads only inside its own Facebook feed, but with an ad network it would also place targeted ads on third-party sites using its own trove of data and identity tools. A company spokeswoman declined to comment on the ad network plans.

Some Still Cautious

While app developers say they're encouraged by the tools Facebook has been building, many remain mindful of the company's history and are wary of integrating too closely with Facebook.

"We wasted so many cycles—hundreds of thousands of dollars—chasing Facebook's distribution model," says Matt Mahan, CEO of Causes. "It's been six very painful years."

Causes is now focusing on its own Website after launching with Facebook's platform in 2007 and spending years trying to make Facebook it's primary hub for doing business. Indeed, Causes was among the last to make such a move: Facebook's platform on the web is a shadow of what it

once was. Many apps simply refer people to their company's website. Games dominate, and represent the vast majority of applications that are located within the company's website.

One test of whether Facebook has truly turned over a new leaf with developers may lie in how the company handles its own emerging emerging hodge-podge of standalone apps. The company recently launched Paper and Messenger, for example, but developers don't yet know whether they will be invited to integrate with those apps in some fashion or even show their ads there.

However it plays out, though, the days of the Facebook being a make-or-break platform for developers are over.

"There's not a lot Facebook could do to cause problems for us," says Ryan Matzner, a director at the mobile app developer Fueled.

FACEBOOK RELATED:

Forget Dating Sites, Try Facebook Instead To Find the One

TIME//Alice Park

Not only are more people meeting on social networks, but their relationships were happier than those that began offline in more traditional ways.

Online dating can be so stressful – filling out the profile and keeping up with all the interactions can feel like a job – so it's no surprise that sometimes digital romance blooms under more Facebook friend-ly circumstances.

Jeffrey Hall, associate professor of Communication Studies at University of Kansas, was surprised to learn that 7% of people who married after meeting online had met for the first time on social networking sites like Facebook, MySpace and ClassMates – not matchmaking chat rooms, or online dating sites or via other romance-centric cyber connections.

"It was really, really astonishing, since [romantic relationships] aren't the purpose of these sites," he says of the data, which came from eHarmony, the online dating service.

Hall decided to investigate the connection, and learn more about who was meeting their significant other this way, and how well these marriages fared. The sample included 19,131 participants who had been married once between 2005 and 2012, and were asked where they met – was it online dating sites; email or instant messaging; online communities such as chat rooms or virtual reality games; or social networking sites.

Those who met on social networking sites were more likely to be younger, married more recently, and African American compared to those who met on other ways on the internet.

And when the participants were compared on marital satisfaction, the partners who met via social networking reported being just as happy as those who were introduced on online dating sites, which tout their compatibility benefits, and more satisfied than those who met on online communities, which nurture conversations among people with similar interests and beliefs. What surprised Hall even more, however, was that the social networking-based relationships were happier than those that began offline, in traditional ways such as being introduced by mutual friends.

"I was surprised by a lot of these results," he says. "I think that social networking is the digital version of being introduced by friends." For most of the 20th century, friend-based introductions were the primary way people met their spouse, he says, and social networks may simply be an extension of that pattern.

That could also explain why marriages that began on social networking sites were also no more likely to end in divorce than unions that were generated by online dating sites that involve algorithms and strangers trying to match people together, rather than acquaintances who know their friends' likes and dislikes and personality best.

Social networking sites also have another potential advantage over dating services – they aren't burdened by the pressure of trying to find love and the anxiety of having to present yourself in the best possible light to catch a mate. While there's no truth filter on sites like Facebook, and there is certainly some amount of self-promotion and exaggeration, having your circle of friends visit your page can keep you pretty honest, which means by and large, your social network version of you is relatively close to the real thing – at least that's what the studies show.

The result? Conversations, observations and interactions on social networking sites may be more casual and low risk, relieved of the pressure and anticipation of a potential date (or rejection for a potential date) that shadow every picture, message and response on dating sites. "In part, social networking sites provide a low risk, high reward place to meet people," says Hall. "It's a good place to do some investigating and a good place to learn about people that doesn't carry the self-presentational weight of creating an online dating profile."

The fact that most of the marriages were among African-Americans could reflect the fact that at the time the data were collected, between 2005 and 2012, African-Americans and Latinos were over-represented on social networking sites compared to their proportions in the general population. For these groups, he says, such sites may have been a way to expand their already close-knit network of friends to include others like them, but not yet part of their local connections.

Of course, the data may also reflect more early social networking behavior than the way that people use the sites today. While it dominated the early days of cyber connecting, for example, MySpace was surpassed by Facebook in 2008 as the primary source of online interactions. And the

rising age of Facebook users may also have an effect on the patterns that Hall found. While it's possible that people who meet and marry via social networking sites may always be from a young demographic, it's also possible that as more people join the site, including those who are looking for a second chance at love later in life, could drive that average age up.

What the results do show is that we shouldn't be so quick to dismiss social networks as an important tool for finding love in the 21st century. According to a Pew Research Center Internet Project poll, in 2013, 24% of internet users have flirted with someone online, compared to 15% in 2005. And Hall's findings suggest that those flirtations, if they're on social networking sites, are increasingly likely to lead to meaningful relationships, and even happy marriages.

Facebook Wants to Turn 25 Million Small Businesses Into Advertisers

Ad Age/Cotton Delo

After years of courting the nation's biggest advertisers, Facebook is going after the 99%. That figure represents the long tail of advertisers; the plumbers and dentists, restaurants and political candidates, app developers and direct-response advertisers. These small and mid-sized businesses don't have Facebook account reps and are left to figure out Facebook advertising for themselves.

It's an operational challenge for the social network, which has invested heavily to educate big brands and agencies about its products. To tackle the long tail, it won't build out a large customer-service teams like YP or Gannett, which specialize in local sales. The idea is to make the product intuitive and steer Facebook page administrators to "boost" posts that are performing well with some ad spend through notifications on their page.

"All the traditional things people think about -- like a sales channel through YP or a call center -- they're all good, but we're dealing with a scale that's really unprecedented," said Dan Levy, Facebook's director of small business. "And trying to figure out how you unlock that is intellectually fun but really hard."

Mr. Levy's team has doubled since he took on the role in July 2012. (It's in the "hundreds" across a few offices, including a call center in Austin.) It's recently started to do outreach to customers whose ads are under-performing -- a departure from its past strategy of just responding to people who've flagged an issue.

But there are only so many small and medium-sized businesses Facebook can talk to. From insights it gleans during those calls, it will get better at simplifying the ad-buying experience for a broad swath, according to Mr. Levy.

"In an ideal world, I don't have to call [someone]. I can do that marketing on Facebook," he said. "But until we've figured it out, that's what we're going to do. It's a lot of prototyping until we can build stuff into the product."

Facebook is borrowing from its big brand and agency strategy in one respect. It's formed an SMB Council comprised of 12 businesses, a structure that's reminiscent of its Client Council that includes chief marketers from P&G, Coke, Walmart and Unilever among its members. With both groups, Facebook solicits feedback on how its products can be improved. (For the big spenders, it also gives a peek at what's on the product roadmap.)

The SMB Council convened at Facebook's Menlo Park, Calif. headquarters for the first time last month, and its 18 members will serve for six months up to a year.

The Council

Council members include an equity theater company in New Jersey with a six-figure marketing budget for the year that intends to spend 30 to 35% of it on Facebook; an auction site for jewelry and clothes that operates on the social network, whose owners spent \$60,000 on Facebook ads last year; and a Kansas City, Mo.-based plumbing company that spends \$300 a month on Facebook.

The recent decline of organic reach was a major discussion topic when the group convened in Silicon Valley last month. It's a sticky point for Facebook with advertisers of any size. Small businesses with limited advertising budgets are even more reliant on free publishing on Facebook than big brands.

That's borne out in the numbers: Facebook has over a million active advertisers. But 25 million small and medium-sized businesses have Facebook pages.

"The challenge is how to get businesses to understand the value that's there, since they weren't paying for it at all and now they're going to have to," said Jim Donio, president of the Eagle Theatre in Hammononton, N.J.

Mr. Donio wants to develop a Facebook education program for businesses and has yet to determine whether it would be free or for-profit and whether it would focus on theaters or a broader set of businesses.

Another Council member, Jeff Morgan of Kansas City's Morgan Miller Plumbing, is also thinking about potentially setting up a side business of Facebook classes.

He says his business makes \$2,000 a week in service calls that originate from Facebook. Its page is a mix of content, including employee spotlights, dog photos, and a recent shot of the dispatcher dressed as the Kansas City Royals mascot to celebrate baseball's opening day.

"About one in every 10 posts is about plumbing," he said. "Other than that, we do stuff about puppy dogs and unicorns."

Algorithm Predicts Which Photos Will Go Viral On Facebook

Social News Daily//Megan Charles

Stanford University researchers have developed a computer algorithm that can predict which photos will likely go viral on Facebook.

In a report being presented at the International World Wide Web Conference in Seoul, South Korea, Jure Leskovec, Stanford doctoral student Justin Cheng, Facebook researchers Lada Adamic and P Alex Dow, and Cornell University computer scientist Jon Kleinberg, describe how they created an algorithm capable of accurately predicting (8 out of 10 times) which Facebook posted photos would go viral.

Statistically, based on data provided by Facebook scientists, only one in 20 photos posted on the social network gets shared maybe once. And just one in 4,000 gets more than 500 shares.

While reviewing what they called photo cascades, researchers studied how quickly a photo was seen and shared – garnering clues as to how a photo goes from being relatively obscure to prolific on cyberspace.

The term ‘cascades’ is used to describe photos or videos being shared multiple times.

The team began by analyzing 150,000 Facebook photos, each of which had been shared at least five times. The data was stripped of identifiers to protect user privacy.

A preliminary analysis of test photos revealed that, at any given point in a cascade, there was a 50-50 chance that the number of shares would double. Variables were assessed in order to determine when doubling events would likely occur, explains The Stanford Daily.

After factoring other criteria, the scientists were able to accurately predict doubling events almost 80 percent of the time. The speed of sharing was the best predictor. Their algorithm became more accurate the more times a photo was shared; 88 percent for photos shared hundreds of times.

But what aspects of a photo drives it to go viral? Alas, other than being shared on multiple platforms, the researchers found no simple trick to ensure widespread sharing.

Salt Lake Mom Monitoring Facebook Helped Thwart Teen Shooting, Police Say

Deseret News//Pat Reavy

A planned shooting near West High School involving a student was thwarted late last week thanks to a mother keeping an eye on her son's Facebook page, according to police.

On Friday, a West High parent called the school's resource officer — who is also a Salt Lake police officer — to report comments allegedly written by two male teenagers on Facebook claiming they were going to shoot her son.

"She had actually read threats and seen the threat on his Facebook page," said Salt Lake police detective Greg Wilking. "There were very specific threats that they were going to go the high school and shoot her son."

In addition, Wilking said, "There was a picture of the gun on Instagram, the gun that was seized. And there were letters written on the hand that was holding the gun, and those letters were gang affiliated."

Just after 2 p.m., the officer found the teens in a vehicle parked at 220 W. 300 North, close by the school. Inside the vehicle officers reported finding a gun and a loaded magazine, cash, marijuana and a "large bong."

The teens may have been waiting for their intended target to walk by after school, Wilking said.

Police could not say Monday whether the two teenagers who were arrested were also West High students. Two boys, ages 16 and 17, were booked into juvenile detention for investigation of various charges, said Wilking. The incident is believed to be gang related.

Wilking praised the intended victim's mother for actively monitoring her son's social media pages, and contacting police when she saw a potential threat.

INSTAGRAM RELATED:

Instagram Helps Launch Careers of Local Talents

Arab News//Sultan Al-Sughair

Many online social networking sites, including Instagram, have become global technological phenomena, which have helped launch the careers of many local talents.

Instagram has opened the door to many young talents and has enabled them to break the barriers of their own countries to reach various countries worldwide by sharing photographs of their work.

Laila Al-Thamir, a student, said that she takes shots of her daily life activities especially her hobbies, whether cooking or embroidery, then chooses a photo to share on her Instagram account.

"Many of my friends and acquaintances like my photos and many colleagues call to ask for a certain dish's recipe from the ones I shared on Instagram," she said.

Meanwhile, Norah Al-Saleh, a student, pointed out that photography is a hobby that is no longer expensive and has become accessible to many due to the technical developments in devices.

She said, "I still remember the days when I used to ask my father to take my film rolls to the studio to print the photos, it used to take several hours or a day to pick the photos up and pay for them."

Al-Saleh said that cameras have evolved and become high-resolution devices and with the presence of social networking sites time and money are no longer wasted, as these sites offer an expedient and efficient platform to share art and ideas.

She said, "People can take pictures using their mobile phones at any moment, and share their shots immediately."

Na'eema Al-Yousif, an employee, highlighted that Instagram is a beautiful phenomenon that highlights women's productivity and talents and creates a network of support.

Agreeing with Al-Yousif, Kareema Al-Rubai'a, a university student, added that the application has given men and women the opportunity and means to express their creativity.

Abdullah Al-Maghluth, a specialist in digital media, said that many individuals launched their careers and received wide recognition by posting pictures of their work on Instagram.

He said, "Nowadays, many international newspapers dedicate a corner to publish pictures taken from social networking sites such as Twitter, Facebook and Instagram. This indicates the power of these sites in reaching the masses in an immediate, convenient and effective manner."

BUSINESS:

Twitter Acquires Android Lockscreen App Cover, Moves Deeper Into Mobile Services TechCrunch//Ingrid Lunden

A very interesting acquisition announcement from Twitter today: it's buying Cover, an Android lockscreen app that lets you customise what apps you see and when. For now, Cover will remain live in the Play store.

"If that changes down the road, we'll provide another update here," the founders Todd Jackson, Gordon Luk and Edward Ho note in a blog post announcing the deal.

Cover is being somewhat cryptic in discussing what it will be working on at Twitter. "Twitter, like Cover, believes in the incredible potential of Android," they write. "They share our vision that smartphones can be a lot smarter — more useful and more contextual — and together we're going to make that happen. We'll be building upon a lot of what makes Cover great, and we're thrilled to create something even better at Twitter."

At the same time, when you consider the work that Facebook has done in developing its Home service around the Android lockscreen, it's clear that on some level, if an app is not owning the SIM that controls the entire phone, or the operating system, this is one very obvious way to remain front of mind for a user and incorporate a series of services that become front and center features for a user.

Apps are an overcrowded game. So owning the lockscreen gives you, effectively, a place to be first in the queue. It also gives Twitter some interesting potential routes for how it might longer-term try to deliver its stream of followers' new and messages outside of its own app. Widgets featuring Twitter, Facebook, Pinterest and other streams are already quite common; Cover could work on ways to formalise and improve that experience.

One question that lingers for me is how, when, and if companies like Twitter (and Facebook) will ever be able to think about these problems in the same way on iOS.

More generally, mobile has become a huge business for Twitter. Apart from the fact that Twitter was created as a mobile-first service, Twitter generates more in advertising from mobile than it does from desktop. Cover, meanwhile, says it has picked up "hundreds of thousands" of users since launching in October 2013.

To date, Cover had raised \$1.7 million in funding, a seed round from First Round Capital, Harrison Metal, Max Levchin, Scott Banister, Charlie Cheever, Keith Rabois, Dave Girouard and Alex Franz.

More to come.

Andromeda: Google's Secret Weapon To Keep Amazon And Microsoft On Their Toes

Readwrite//Jodi Mardesich

Years ago, Google figured out that users prize speed above almost everything when it comes to surfing the Web. They're now applying that insight to courting developers, too, through a tool named Andromeda.

Google Compute Engine, the version of Google's infrastructure it rents out to developers, is getting access to Andromeda, a set of technologies the company uses to speed up its own networking. Last week, it turned Andromeda on in two of its four Compute Engine zones this week.

Enter Andromeda

Andromeda's not a product Google's cloud customers can sign up for, and it doesn't have APIs developers can write to directly. So, what's the fuss about?

Google Distinguished Engineer Amin Vahdat described it in a post:

Andromeda is a Software Defined Networking (SDN)-based substrate for our network virtualization efforts. It is the orchestration point for provisioning, configuring, and managing virtual networks and in-network packet processing.

Let's unpack that: Increasingly, rather than setting up data centers, storage, and networks by setting up new servers, companies are using software to run existing hardware in new ways. By defining usage in software, you can disaggregate and share expensive physical resources. In the case of software-defined networking, the resources—servers, routers, switches, and so on— are deep in the bowels of Google's data centers, which provide the underpinnings for its cloud infrastructure.

Network virtualization means that even though many customers are sharing the same network—both Google itself, as well as its cloud customers—they can be configured and managed independently, with their own address management, firewalls, and access control lists.

"If you choose to run your own infrastructure, you can make those investments, but it requires you to figure out how to scale this out and manage it," says Google product manager Sunil James. "Google Cloud gives you the ability to grow your business at whatever scale you need. Andromeda is an example of the kind of thinking we have at Google in terms of how we want to make something scalable and robust, not only for Google to use, but for our customers."

For Google customers, that means they have to make fewer tradeoffs when they move their computing to the cloud.

Google is far from alone in taking the software-defined approach to its network. Amazon and Microsoft, its archrivals in cloud computing, also use SDN. Microsoft has had 100 developers working for four years on software-defined networking features for Azure. Like Google, it uses the same SDN technologies for its own services like Xbox Live, Skype and Office 365 that it does in Azure. Amazon Web Services has had software-defined networking features like CloudFormation for years.

But while Google may be playing catch-up in rolling out SDN features to developers, it has the unique advantage of the gigantic scale of its in-house computing infrastructure, which it has honed for high-throughput performance.

Vying For Developers

Last month, Google slashed its cloud pricing. Now Andromeda gives it another weapon in the battle for developers—performance. In this case, that means the speed of data transmission.

Even though Google just turned on Andromeda in some of its cloud last week, customers are already noticing a difference.

David Mytton, CEO of Server Density, a server- and website-monitoring service based in London, ran benchmarks comparing throughput of Google Cloud without Andromeda, Google Cloud with Andromeda, and Amazon's EC2 service. With Andromeda, he said Google was nine times faster than Amazon. (That sounds remarkable, but it's actually just a modest improvement, since even without Andromeda, Mytton found Google's performance was seven times that of Amazon.)

Data throughput is only one way to benchmark cloud-computing services, and it may not matter to all customers. Still, the combination of lowered prices and high performance is compelling for some.

Mytton, who is evaluating cloud providers as he considers a move from his current provider, SoftLayer, said he is leaning toward Google due to its performance and lower cost.

"Amazon is very expensive," he said. "You have to pay a lot of upfront costs."

Still, there are some services he is still looking for, like "the ability to have guaranteed throughput between regions," which Google doesn't currently offer. The good news is that Andromeda provides a foundation to build those services in the future.

E-Learning Platform Lynda.com Buys Compiler To Add In-Browser Coding Tools, Price Around \$20M

TechCrunch//Ingrid Lunden

Lynda.com, the online education platform that raised its first and only round of \$103 million about a year ago, is today announcing an acquisition that will further Lynda.com's reach with developers and expand the kinds of services it can offer to users. It's acquiring Compilr, a Halifax, Canada startup that runs a cloud-based platform for people to learn, write and test code from within a browser. The companies are not commenting on the terms of the deal but we have heard that it is for around \$20 million.

Compilr will now become part of the Lynda.com platform.

It looks like Compilr, co-founded and run by Patrick Hankinson and Tim Speed, was bootstrapped before today. That's something that aligns well with the culture and ethos at Lynda.com, which was also self-funded until it took its mammoth round from Accel and Spectrum Equity last year. But that lack of outside investment may have also been one of the things that hindered Compilr's growth longer term. In 2012, Hankinson noted that Compilr was rejected by more than 35 VCs — something that compelled the company to implement charging models early on, with monthly subscriptions to the service costing \$10.

It's not clear if those prices will remain intact; Lynda for now is not commenting further on the deal. In any case, existing Compilr users are being offered free training now on Lynda.com.

Compilr is only Lynda.com's second acquisition ever. The first was Germay's video2brain last year, made to grow the company's international portfolio.

So where will Compilr fit into Lynda.com? Up to now, a lot of Lynda.com's business has been based around an expansive collection of videos covering the areas of software and technology, as well as general business training and the creative industries. That catalog is pushing some 100,000 videos to date. Compilr will not only add more on-site training abilities, with its cloud-based platform for creating code; but it will help Lynda.com expand more in the specific vertical of tech and offering services and courses to developers (and developers in training).

"The acquisition of Compilr reflects our dedication to providing members the best way to learn across a variety of segments, whether we build or buy to achieve those goals," Eric Robison, president and CEO of lynda.com, said in a statement. "We recognize the growing market demand for programming language instruction and are committed to providing a broad range of high-quality computer programming courses. This aligns with our learning philosophy and allows us to maintain and grow our market leadership."

As a famous VC once said, software is eating the world, and so the need for more software engineers is certainly not diminishing. Lynda.com cites figures from the U.S. Bureau of Labor Statistics that project employment of software developers growing 22% between 2012 and 2022, "much faster than the average for all occupations."

Compilr currently supports some 12 programming languages and offers courses and support for beginners as well as advanced programmers.

Compilr competes with the likes of Koding, Cloud9 IDE, and Codenvy.

POLICY//POLITICAL:

High Court Won't Take Up NSA Case

The Hill//Julian Hattem

The Supreme Court on Monday declined an initial challenge to the National Security Agency's (NSA) bulk collection of information about the public's telephone calls.

The high court passed on a chance to review a lower court ruling that found the controversial program "almost Orwellian," which means the case will go through the normal appeals process as lawmakers battle over reform proposals.

An intervention from the court would have been unusual, but conservative activist and lawyer Larry Klayman had tried to leapfrog the appeals process because of the importance of the issue.

The NSA program collects phone metadata, a list of which numbers people call as well as the frequency and duration of their calls, but not the content of the conversations themselves.

The issue has become the subject of a slew of court challenges from Sen. Rand Paul (R-Ky.), the American Civil Liberties Union and other advocacy groups.

In December, Judge Richard Leon of the U.S. District Court in Washington, D.C., said that the NSA program, revealed by former agency contractor Edward Snowden, was likely unconstitutional. The ruling was a major blow to defenders of the spy agency and preceded a similar ruling from a government civil liberties panel in January.

Other judges have disagreed. A judge on the New York District Court ruled to uphold the program, as have judges on the Foreign Intelligence Surveillance Court.

The high court's decision not to take up the case comes as Congress has begun debating legislative ways to end the NSA's data collection.

A plan unveiled by the White House late last month, which would need to be passed by Congress, would keep the records in the hands of private phone companies, accessible to government agents with a court order.

Another proposal from leaders of the House Intelligence Committee would similarly end the government's collection of the records, but make it easier for agents to obtain them from a private company.

Congress needs to authorize reforms to the program by next June or else lose it altogether, an outcome intelligence officials have said would be disastrous.

The case is *Klayman v. Obama*.

GOP Bill Keeps US Internet Control

The Hill//Peter Kasperowicz

Rep. Sean Duffy (R-Wis.) has proposed legislation that would block the federal government from handing over control of the Internet management system.

Back in March, the Department of Commerce said it would begin to cede control over the system that operates the Internet's domain name system. That system is now controlled by the Commerce Department's National Telecommunications and Information Administration (NTIA).

The NTIA said it would continue to oversee the Internet Corp. for Assigned Names and Numbers (ICANN) through September 2015, but then it would ease out of the role.

That announcement led to immediate criticism that the move would reduce the control the U.S. has over Internet functions and increase the risk that Internet freedom could slip away without that U.S. influence. Duffy's bill, H.R. 4398, says flatly that the NTIA cannot cede its control.

"As Americans, we value our constitutional right of freedom of speech and have promoted this value throughout the world," he said in a statement to The Hill. "We should not give up our stewardship of the Internet so that the United Nations or countries like China or Russia, that do not hold free speech in the same regard, can have the opportunity to take control."

Duffy's bill is the Global Internet Freedom (GIF) Act. The two-page legislation says the assistant secretary of Commerce for communications and information "may not relinquish the responsibility of the National Telecommunications and information Administration with respect to the Internet Assigned Numbers Authority Functions."

INTERNATIONAL:

Google Appeals Ongoing YouTube Blockade in Turkey

RT//Staff Writer

US internet giant Google has gone to Turkey's Constitutional Court to appeal the government's decision to block its video file sharing service YouTube. The ban, which had been imposed before local elections, has been upheld by a local court ruling.

Google on Monday said it has filed three appeals to Turkish courts in relation to the ongoing blackout of YouTube. Three petitions have been filed to Turkish criminal, administrative and constitutional courts by Google's lawyers, the Wall Street Journal (WSJ) reported.

According to the Hurriyet Daily News, YouTube's Turkish lawyer, Gonenc Gurkaynak, has filed a complaint to the Turkish Constitutional Court and a lawsuit demanding "a stay of execution and cancelation of the decision on the ban" to the 4th Administrative Court of Ankara. Gurkaynak also appealed the ruling of the Golbasi Criminal Court that annulled its own decision on lifting the ban on April 5.

Turkey's Telecommunications Authority (TIB) blocked YouTube on March 27 after allegedly leaked audiotapes of senior Turkish officials discussing a false flag operation against Syria emerged there days before local elections. While the government advocated the ban citing national security concerns, TIB cited a decision by Golbasi Criminal Court.

Curiously, the same Ankara-based court on Saturday changed its own decision by ordering only 15 YouTube videos to be banned instead of the entire service. The latest ruling followed a Constitutional Court order to unblock Twitter, which the court blasted as a violation of freedom of speech. Today's Zaman claimed that the lower court then issued a "self-critical" statement, also calling its earlier ruling a "major intervention into freedom of speech, a fundamental value of a democratic society."

However, the local prosecutor's office challenged the April-5 decision and it was promptly overturned by the higher Golbasi Criminal Court of First Instance, which stated the blocking of YouTube must continue until the "criminal content" is removed from the site.

A Google spokesman told the WSJ via email that “it is obviously very disappointing to people and businesses in Turkey that YouTube is still blocked, and we are actively challenging the ban in the courts.” The outlet said Google’s defense argued in the petitions that the nationwide blocking of YouTube is “overbroad” under Turkish law and then required a constitutional challenge “based on freedom of speech.”

Google recently claimed that its services are being effectively blocked by Turkish internet providers, who reportedly are using all means to prevent the users from circumventing the ban. Turkish providers are also believed to be still blocking Twitter despite the Constitutional Court’s ruling, which Turkish Prime Minister Recep Tayyip Erdogan said he has to obey but “do[es] not respect.”

The recent scandals involving Erdogan’s government and the social media ban that followed them caused outrage in Turkish society, with opposition-minded activists condemning the ban as an act of “censorship” and “dictatorship.” However, Erdogan’s AKP party’s candidates managed to win at the March-30 local elections in 49 of the 81 Turkish regions, highlighting the Turkish leader’s popularity despite all the controversy.

In Ankara, where the AKP and main opposition party, CHP, ran an extremely tight race, thousands of demonstrators took to the streets last week demanding that the Supreme Electoral Council recount the local election results. AKP was declared the winner in the Turkish capital with a slender one percent of margin. CHP filed an official recount request, while the protesters were pushed off Ankara’s streets with police water cannon and tear gas.

WhatsApp, E-Plus Launch A €10 SIM In Germany With Free WhatsApp Usage Included

TechCrunch//Ingrid Lunden

Back in February, Jan Koum, CEO of Facebook-owned WhatsApp, hinted that the company would soon be unveiling a new way of working with carriers, first in Germany, with special tariffs to access the app. Today that deal is now live. E-Plus now sells a prepaid SIM that gives users unlimited access to WhatsApp outside of their data plans.

For €10 (\$14), users get 600 credits that can be used interchangeably for 1 megabyte of data, 1 minute of talk or 1 SMS (each costs 1 credit), plus all the WhatsApp messaging that they might want to use. It’s not clear whether voice services, which WhatsApp says are coming but have yet to launch in Germany, will come as part of the deal or whether they will be charged separately.

As the German blog AndroidNext points out, WhatsApp is installed on some 90 percent of smartphones in the country already — working out to some 30 million users. In other words, this seems to be less about spreading the good word about WhatsApp as it is about E-Plus trying to pick up users off rival carriers. An aggressive move in a competitive market.

On the other hand, given that Germany is a “safe” market for WhatsApp (ironically a market that has been rather challenging for Facebook on the privacy front) it’s a good place for it to try out new things like this to see how well they do. As the company — and Facebook — move deeper into mobile telephony services like voice, seeing if they can get users to pay up for “WhatsApp SIMs” is a logical step.

As for how it works, SIM top-ups, as well as top-ups for extra credits for the month, come via an interface that appears to be separate from WhatsApp itself but has been created with the same branding and styling as the app itself:

Longer term, E-Plus says that it will enable users to activate automatic top-ups. To promote the SIM, it’s also encouraging users to recommend other friends to use it; for every two friends who use your reference code, you get an extra €10 credit.

This is not the first time that WhatsApp has worked with carriers; it offers reduced tariffs with bundles with some 50 different mobile operators worldwide. What’s different here is how it has integrated with E-Plus to create a SIM, which now comes with WhatsApp branding along with the free usage allowance. It doesn’t appear that taking the SIM lets you waive the \$0.99 annual subscription fee for WhatsApp itself that users need to pay after the first year of service, however.

We’re reaching out to WhatsApp for more information and will update when we learn more.

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